

HD35AP

Base unit (Access Point) with USB output



Device acting as an interface between the network data loggers that are positioned in the measurement sites, and the PC. It receives via wireless the data acquired by the remote data loggers and communicate with the PC via the **USB** output.

Does not require the installation of USB drivers.

Directly powered by the USB port of the PC, if connected, or by the external 6 Vdc power supply. Internal backup battery.

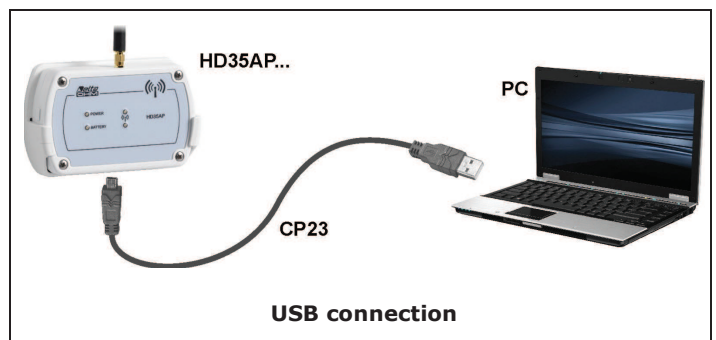
If the PC is not connected, the internal memory allows the storage of the measurement data received from the data loggers (the memory is managed in circular mode: when the memory is full, the oldest data are overwritten by the new ones).

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) towards data loggers with internal antenna. > 500 m (E, J, U) towards repeaters and data loggers with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Power supply	Internal lithium-ion 3.7 V rechargeable battery, 2250 mA/h capacity, JST 3-pole connector. Optional external 6 Vdc power supply (SWD06). Directly powered by a PC USB port.
Current consumption	30 mA
Battery life	3 days typical
USB output	Yes, with Mini-USB connector (CP23 cable)
RS485 output	No
Ethernet connection	No
Wi-Fi connection	No
GSM connection	No
Operating conditions	-10...+60 °C / 0...85 %RH non condensing
Dimensions	135 x 86 x 33 mm (excluding probe)
Weight	200 g approx.
Housing	ABS

CONNECTION TO PC



BASE UNIT ORDERING CODES

HD35AP. **RADIO FREQUENCY:**
J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35APG

Base unit (Access Point)

with USB output and integrated GSM module



Device acting as an interface between the network data loggers that are positioned in the measurement sites, and the PC. It receives via wireless the data acquired by the remote data loggers and communicate with the PC via the **USB** output or the **GSM** connection.

Does not require the installation of USB drivers.

The integrated **GSM** module allows **e-mail** or **SMS** alarm transmission and stored data transmission via **e-mail** or to an **FTP** address. SMS messages containing commands can be sent by a mobile phone to the base unit, to change some GSM settings of the unit.

Directly powered by the USB port of the PC, if connected, or by the external 6 Vdc power supply. Internal backup battery.

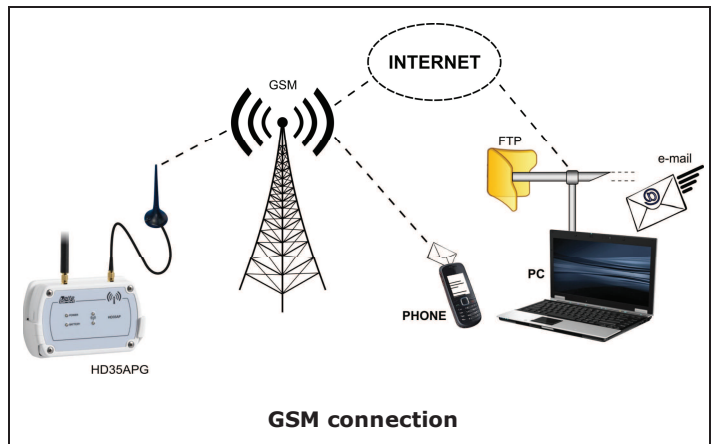
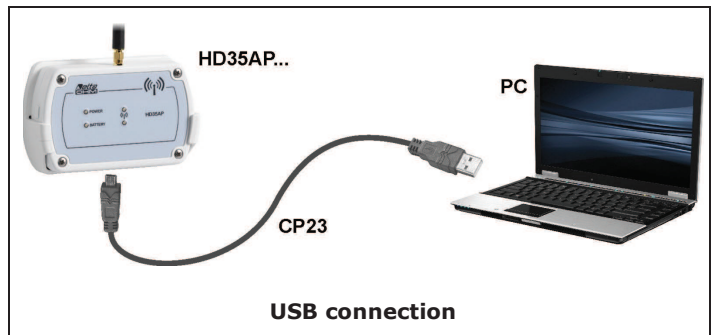
If the PC is not connected, the internal memory allows the storage of the measurement data received from the data loggers (the memory is managed in circular mode: when the memory is full, the oldest data are overwritten by the new ones).

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) towards data loggers with internal antenna. > 500 m (E, J, U) towards repeaters and data loggers with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Power supply	Internal lithium-ion 3.7 V rechargeable battery, 2250 mA/h capacity, JST 3-pole connector. Optional external 6 Vdc power supply (SWD06) . Directly powered by a PC USB port (*).
Current consumption	30 mA (**)
Battery life	3 days typical (**)
USB output	Yes, with Mini-USB connector (CP23 cable)
RS485	No
Ethernet connection	No
Wi-Fi connection	No
GSM connection	Yes, for the transmission of alarm e-mail or SMS and data by e-mail or FTP (***)
Operating conditions	-10...+60 °C / 0...85 %RH non condensing
Dimensions	135 x 86 x 33 mm (excluding probe)
Weight	200 g approx.
Housing	ABS

CONNECTION TO PC



(*) The connection of the SWD06 external power supply is recommended if the GSM transmission is used.

(**) With typical GSM activity (an intensive use of the GSM transmission can significantly increase the consumption and reduce the battery life).

(***) In the basic version, the data are transmitted via FTP with a minimum interval equal to 2 minutes and only if in the network there are up to 5 data loggers. For the full FTP functionality, the PLUS option has to be requested.

BASE UNIT ORDERING CODES

HD35APG.



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to
 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35APS

Base unit (Access Point)

with USB and RS485 Modbus-RTU outputs



Device acting as an interface between the network data loggers that are positioned in the measurement sites, and the PC/PLC. It receives via wireless the data acquired by the remote data loggers and communicate with the PC/PLC via the **USB** output or the **RS485** with **Modbus-RTU** protocol output.

Does not require the installation of USB drivers. In RS485 Modbus-RTU mode, the base unit operates as a multiplexer for the transmission of Modbus commands from PC/PLC to network devices.

Directly powered by the USB port of the PC, if connected, or by the external 6 Vdc power supply. Internal backup battery.

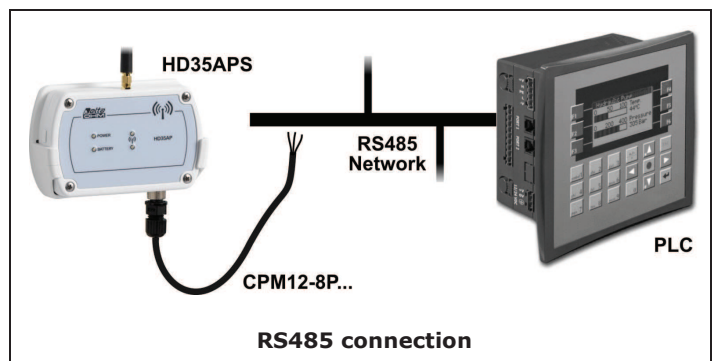
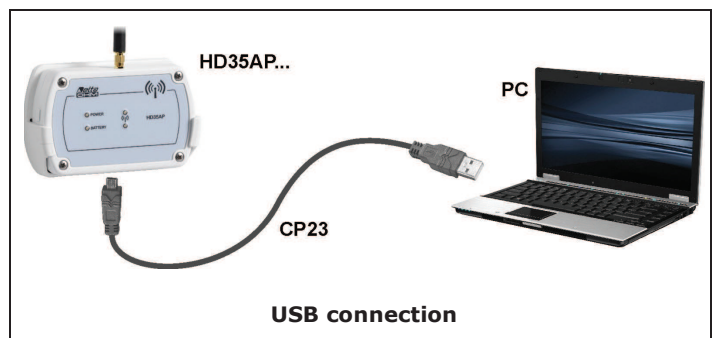
If the PC is not connected, the internal memory allows the storage of the measurement data received from the data loggers (the memory is managed in circular mode: when the memory is full, the oldest data are overwritten by the new ones).

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) towards data loggers with internal antenna. > 500 m (E, J, U) towards repeaters and data loggers with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Power supply	Internal lithium-ion 3.7 V rechargeable battery, 2250 mA/h capacity, JST 3-pole connector. Optional external 6 Vdc power supply (SWD06). Directly powered by a PC USB port.
Current consumption	30 mA
Battery life	3 days typical
USB output	Yes, with Mini-USB connector (CP23 cable)
RS485	Yes, with Modbus-RTU protocol
Ethernet connection	No
Wi-Fi connection	No
GSM connection	No
Operating conditions	-10...+60 °C / 0...85 %RH non condensing
Dimensions	135 x 95 x 33 mm (excluding probe)
Weight	200 g approx.
Housing	ABS

CONNECTION TO PC



BASE UNIT ORDERING CODES

HD35APS.



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)

E = 868 MHz (Europe)

U = 902-928 MHz (U.S.A. and Canada) reducible to

915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35APW

Base unit (Access Point)

with USB output, Ethernet connection and Wi-Fi interface



Device acting as an interface between the network data loggers that are positioned in the measurement sites, and the PC/PLC. It receives via wireless the data acquired by the remote data loggers and communicate with the PC/PLC via the **USB** output or the **Ethernet** or **Wi-Fi** local network.

Does not require the installation of USB drivers.

Directly powered by the USB port of the PC, if connected, or by the external 6 Vdc power supply. Internal backup battery.

If the PC is not connected, the internal memory allows the storage of the measurement data received from the data loggers (the memory is managed in circular mode: when the memory is full, the oldest data are overwritten by the new ones).

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

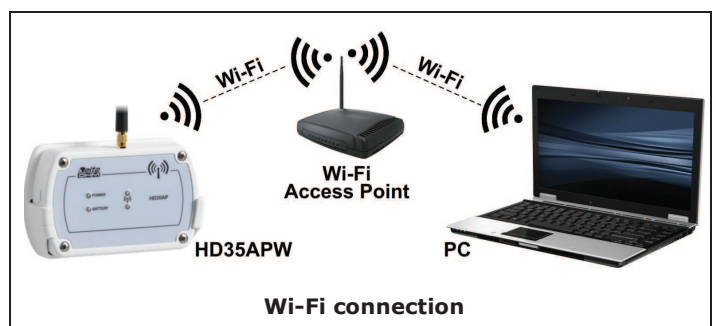
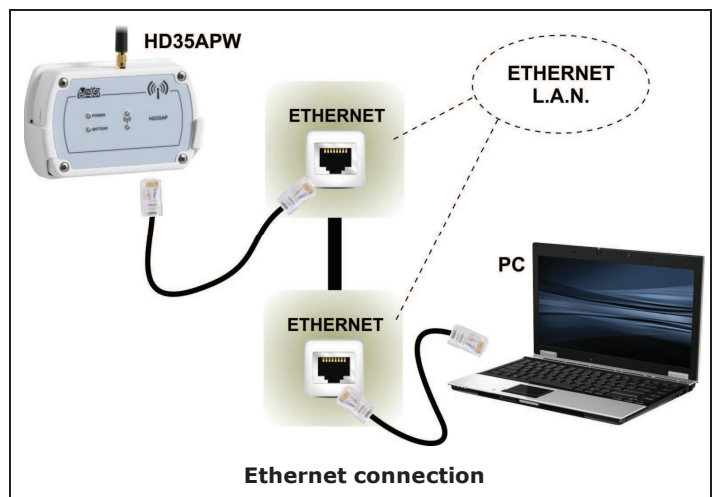
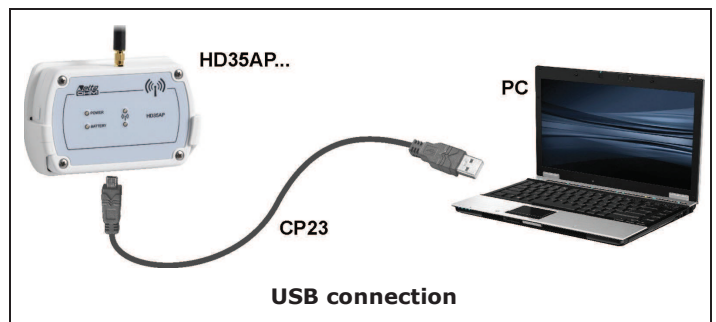
TECHNICAL CHARACTERISTICS

Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) towards data loggers with internal antenna. > 500 m (E, J, U) towards repeaters and data loggers with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Power supply	Internal lithium-ion 3.7 V rechargeable battery, 2250 mA/h capacity, JST 3-pole connector. Optional external 6 Vdc power supply (SWD06). Directly powered by a PC USB port (*).
Current consumption	30 mA (without Ethernet/Wi-Fi) 160 mA (with Ethernet), 275 mA (with Wi-Fi)
Battery life	3 days typ. if not connected to local network 11 hours typ. (Ethernet), 8 hours typ. (Wi-Fi)
USB output	Yes, with Mini-USB connector (CP23 cable)
RS485	No
Ethernet connection	Yes. Allows the transmission of alarm e-mail and data by e-mail or FTP (**) . Supports the Modbus TCP/IP protocol.
Wi-Fi connection	Yes. Allows the transmission of alarm e-mail and data by e-mail or FTP (**) . Supports the Modbus TCP/IP protocol.
GSM connection	No
Operating conditions	-10...+60 °C / 0...85 %RH non condensing
Dimensions	135 x 86 x 33 mm (excluding probe)
Weight	200 g approx.
Housing	ABS

(*) The connection of the SWD06 external power supply is recommended if the Ethernet or Wi-Fi transmission is used.

(**) In the basic version, the data are transmitted via FTP with a minimum interval equal to 2 minutes and only if in the network there are up to 5 data loggers. For the full FTP functionality, the PLUS option has to be requested.

CONNECTION TO PC



BASE UNIT ORDERING CODES

HD35APW.



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35RE

Wireless repeater (Range Extender)



The device is able to act as a bridge between the base unit HD35AP... and the remote data loggers HD35ED..., allowing the communication distance between data loggers and base unit to be increased.

Several repeaters in cascade can be used.

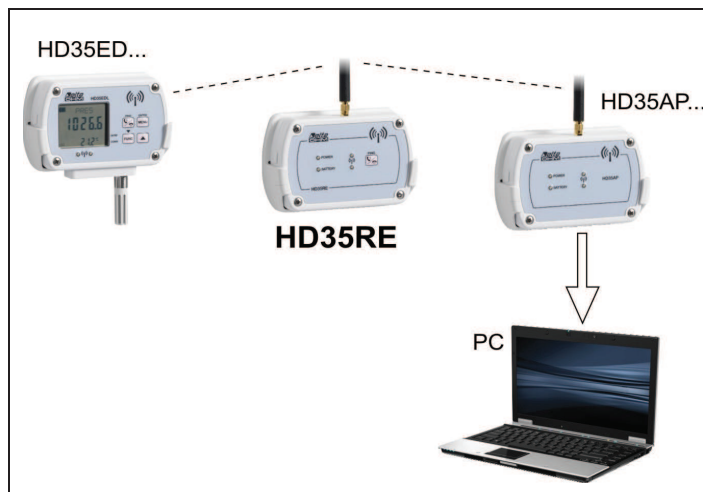
External 6 Vdc power supply. Internal backup battery.

Configuration via **HD35AP-S** software. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) towards data loggers with internal antenna. > 500 m (E, J, U) towards base unit, repeaters and data loggers with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Power supply	Internal lithium-ion 3.7 V rechargeable battery, 2250 mA/h capacity, JST 3-pole connector. Optional external 6 Vdc power supply (SWD06) . Directly powered by a PC USB port.
Current consumption	30 mA
Battery life	3 days typical
Operating conditions	-10...+60 °C / 0...85 %RH non condensing
Dimensions	135 x 86 x 33 mm (excluding antenna)
Weight	200 g approx.
Housing	ABS

EXTENDING THE TRANSMISSION RANGE



REPEATER ORDERING CODES

HD35RE.



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)

E = 868 MHz (Europe)

U = 902-928 MHz (U.S.A. and Canada) reducible to
915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35REW

Waterproof wireless repeater (Range Extender)



The device is able to act as a bridge between the base unit HD35AP... and the remote data loggers HD35ED..., allowing the communication distance between data loggers and base unit to be increased.

Several repeaters in cascade can be used.

Powered by the internal battery. Suitable for places where the external power supply is not available.

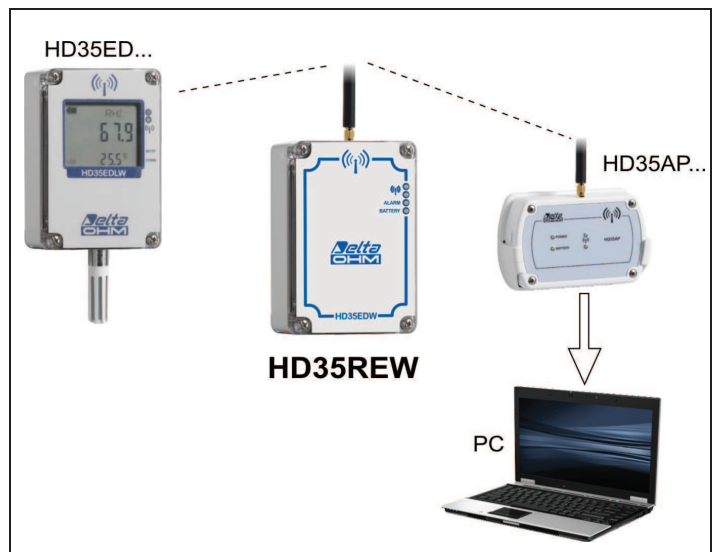
Configuration via **HD35AP-S** software.

Installation: wall mount or fixing to a 40 mm diameter mast through the clamping HD2003.77/40 (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation.

TECHNICAL CHARACTERISTICS

Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) towards data loggers with internal antenna. > 500 m (E, J, U) towards base unit, repeaters and data loggers with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Power supply	Internal 3.6 V lithium-thionyl chloride (Li-SOCl ₂) not rechargeable battery, capacity 8400 mAh, size C, Molex 5264 2-pole connector.
Battery life	2 years typical (repeating the signal of 5 data loggers transmitting every 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	120 x 80 x 55 mm (excluding antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

EXTENDING THE TRANSMISSION RANGE



REPEATER ORDERING CODES

HD35REW. **RADIO FREQUENCY:**
J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED7P/...TC – HD35EDG7P/...TC

1, 2 or 3-input temperature wireless data logger for Pt100/Pt1000 sensor temperature probes with cable



Temperature wireless data logger. Graphic LCD display (only with **option G**). It stores the measures in its internal memory (from 42,000 to 68,000 samples depending on the number of inputs) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Depending on the model, one, two or three inputs with M12 connector for temperature probes with **Pt100/Pt1000** sensor:

- HD35ED7P/1 – HD35EDG7P/1:** one input
- HD35ED7P/2 – HD35EDG7P/2:** two inputs
- HD35ED7P/3 – HD35EDG7P/3:** three inputs

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Temperature	
Sensor	Pt100 / Pt1000 1/3 DIN thin film
Measuring range	-100...+350 °C (the measuring range can be limited by the operating temperature of the used probe)
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 102 x 33 mm (excluding the probes)
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

TP35.1...: stainless steel temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: -50...+105 °C. Dimensions: Ø 6 x 50 mm. 4-pole M12 connector.



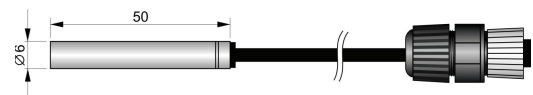
TP35.1. [] /C **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35.2...: thermoplastic rubber temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: 0...+70 °C. Dimensions: Ø 5 x 20 mm. 4-pole M12 connector.



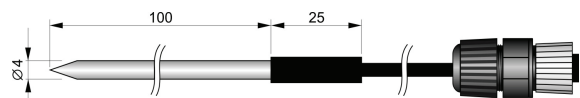
TP35.2. [] /C **3** = cable 3m, **5** = cable 5m

TP35.4...: stainless steel temperature probe. 4-wire 1/3 DIN Pt100 sensor. Operating temperature: -50...+105 °C. Dimensions: Ø 6 x 50 mm. 4-pole M12 connector.



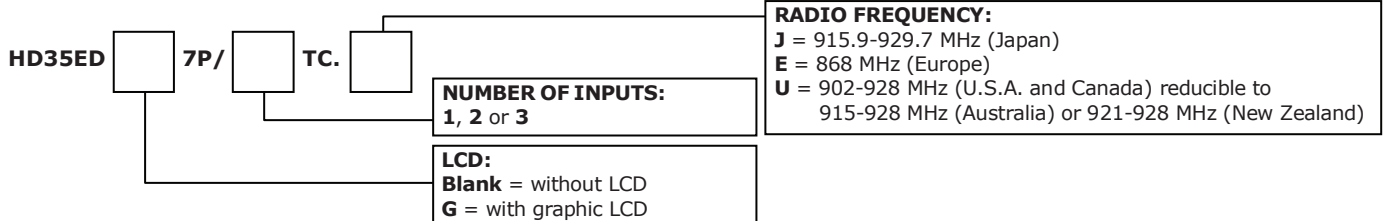
TP35.4. [] /C **3** = cable 3m, **5** = cable 5m, **10** = cable

TP35.5...: stainless steel penetration temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: -40...+300 °C. Dimensions: Ø 4 x 100 mm. 4-pole M12 connector.



TP35.5. [] /C **3** = cable 3m, **5** = cable 5m

DATA LOGGER ORDERING CODES



HD35EDN/...TC – HD35EDLN/...TC

1, 2 or 3-input temperature wireless data logger for NTC sensor temperature probes with cable



Temperature wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (from 42,000 to 68,000 samples depending on the number of inputs) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Depending on the model, one, two or three inputs with M12 connector for temperature probes with **NTC10K Ω** sensor:

- HD35EDN/1 – HD35EDLN/1:** one input (68,000 samples)
- HD35EDN/2 – HD35EDLN/2:** two inputs (52,000 samples)
- HD35EDN/3 – HD35EDLN/3:** three inputs (42,000 samples)

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C (the measuring range can be limited by the operating temperature of the used probe)
Resolution	0.1 °C
Accuracy	\pm 0.3 °C in the range 0...+70 °C \pm 0.4 °C outside
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J) / 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 102 x 33 mm (excluding the probes)
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

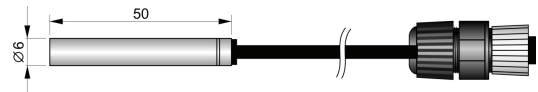
PROBES

TP35N1...: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+85 °C. Dimensions: \varnothing 5 x 40 mm. 4-pole M12 connector.



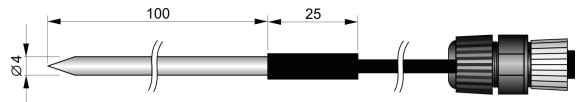
TP35N1. /C **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35N2...: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: 0...+70 °C. Dimensions \varnothing 6 x 50 mm. Double insulation. 4-pole M12 connector.



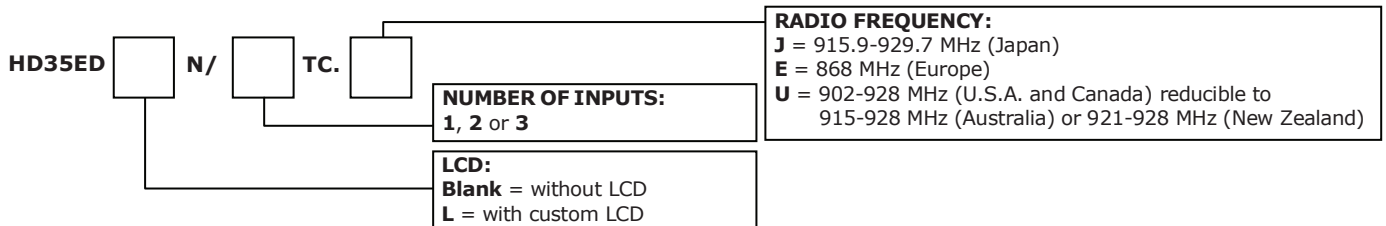
TP35N2. /C **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35N5...: stainless steel penetration temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+105 °C. Dimensions: \varnothing 4 x 100 mm. 4-pole M12 connector.



TP35N5. /C **3** = cable 3m, **5** = cable 5m

DATA LOGGER ORDERING CODES



HD35EDNTV – HD35EDLNTV

Temperature wireless data logger with fixed vertical probe



Temperature wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (68,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature fixed vertical probe with **NTC10K Ω** temperature sensor.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	\pm 0.3 °C in the range 0...+70 °C \pm 0.4 °C outside
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



HD35ED1TV – HD35EDL1TV

Humidity wireless data logger with fixed vertical probe



Humidity wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (68,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Relative humidity fixed vertical probe with **high accuracy R.H. sensor**.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	±2% over the whole operating temperature range
Long-term stability	1% / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES

HD35ED

1TV.

LCD:
Blank = without LCD
L = with custom LCD

RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)

E = 868 MHz (Europe)

U = 902-928 MHz (U.S.A. and Canada) reducible to
915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED1TVI – HD35EDL1TVI

Humidity wireless data logger with fixed vertical probe



Humidity wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (68,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Relative humidity fixed vertical probe.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0..80 % RH) ± [1.8 + 0.11 * (RH -80)] % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max=[100-2*(T-80)] @ T=80...105 °C)
Temperature drift	±2% over the whole operating temperature range
Long-term stability	0.5% / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



HD35ED1NTC – HD35EDL1NTC

Temperature and humidity wireless data logger for T/RH combined probe with cable



Temperature and humidity wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the **HP3517TC...** temperature and relative humidity combined probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J) / 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 102 x 33 mm (excluding the probe)
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

HP3517TC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10K Ω @ 25 °C temperature sensor. 4-pole M12 connector.

CABLE LENGTH:
2 = 2 m, 5 = 5 m, 10 = 10 m

STEM LENGTH:
TC1 = 135 mm, TC3 = 335 mm

TP35N1...: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+85 °C. Dimensions: \varnothing 5 x 40 mm. 4-pole M12 connector.

TP35N1. /C 3 = cable 3m, 5 = cable 5m, 10 = cable 10m

TP35N2...: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: 0...+70 °C. Dimensions: \varnothing 6 x 50 mm. Double insulation. 4-pole M12 connector.

TP35N2. /C 3 = cable 3m, 5 = cable 5m, 10 = cable 10m

TP35N5...: stainless steel penetration temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+105 °C. Dimensions: \varnothing 4 x 100 mm. 4-pole M12 connector.

TP35N5. /C 3 = cable 3m, 5 = cable 5m

Note: connecting a temperature only probe, the humidity measurements will be in error.

DATA LOGGER ORDERING CODES

HD35ED [] 1NTC. []

LCD:
Blank = without LCD
L = with custom LCD

RADIO FREQUENCY:
J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to
915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED17PTC – HD35EDL17PTC

Temperature and humidity wireless data logger for T/RH combined probe with cable



Temperature and humidity wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the **HP3517ETC...** temperature and relative humidity combined probe with **Pt100** temperature sensor and **high accuracy R.H. sensor**.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-40...+150 °C
Temperature drift	±2% over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	Thin film 1/3 DIN Pt100
Measuring range	-40...+150 °C
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 102 x 33 mm (excluding the probe)
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

HP3517ETC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and Pt100 temperature sensor. 4-pole M12 connector.

CABLE LENGTH:
2 = 2 m, 5 = 5 m, 10 = 10 m

STEM LENGTH:
TC1 = 135 mm, TC3 = 335 mm

DATA LOGGER ORDERING CODES

HD35ED 17PTC.

LCD:
Blank = without LCD
L = with custom LCD

RADIO FREQUENCY:
J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED1NTV – HD35EDL1NTV

Temperature and humidity wireless data logger with T/RH fixed vertical probe



Temperature and humidity wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

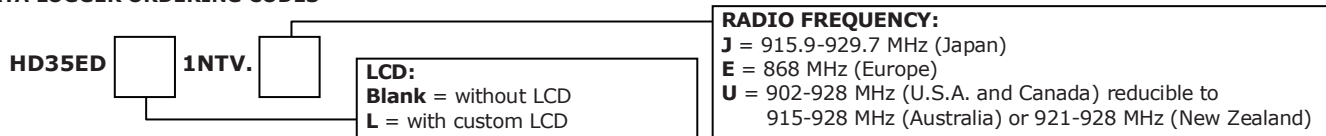
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



HD35ED1NTVI – HD35EDL1NTVI

Temperature and humidity wireless data logger with T/RH fixed vertical probe



Temperature and humidity wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with temperature sensor integrated in the R.H. module.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0..80 % RH) ± [1.8 + 0.11 * (RH - 80)] % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max=[100-2*(T-80)] @ T=80...105 °C)
Temperature drift	±2% over the whole operating temperature range
Long-term stability	0.5% / year
Temperature	
Sensor	Sensor integrated in humidity module
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.2 °C in the range 0...+60 °C ± (0.2 - 0.05 * T) °C in the range T=-40...0 °C ± [0.2 + 0.032 * (T-60)] °C in the range T=+60...+105 °C
Long-term stability	0.05 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



HD35ED1N/2TC – HD35EDL1N/2TC

Temperature and humidity wireless data logger for T/RH combined probe and temperature probe with cable



Temperature and humidity wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Two inputs with M12 connector for the **HP3517TC...** temperature and relative humidity combined probe with **NTC10KΩ** temperature sensor and **high accuracy R.H. sensor**, and for the temperature only probe with **NTC10KΩ** sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	±2% over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 kΩ @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J) / 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0..85 %RH non condensing
Dimensions	135 x 102 x 33 mm (excluding the probes)
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

HP3517TC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10KΩ @ 25 °C temperature sensor. 4-pole M12 connector.



HP3517 [] / C []

CABLE LENGTH:
2 = 2 m, 5 = 5 m, 10 = 10 m

STEM LENGTH:
TC1 = 135 mm, TC3 = 335 mm

TP35N1...: stainless steel temperature probe. NTC10KΩ @ 25 °C sensor. Operating temperature: -20...+85 °C. Dimensions: Ø 5 x 40 mm. 4-pole M12 connector.



TP35N1. [] / C []

3 = cable 3m, 5 = cable 5m, 10 = cable 10m

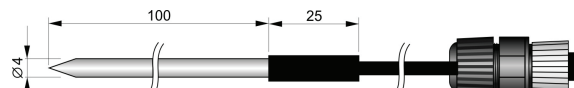
TP35N2...: stainless steel temperature probe. NTC10KΩ @ 25 °C sensor. Operating temperature: 0...+70 °C. Dimensions Ø 6 x 50 mm. Double insulation. 4-pole M12 connector.



TP35N2. [] / C []

3 = cable 3m, 5 = cable 5m, 10 = cable 10m

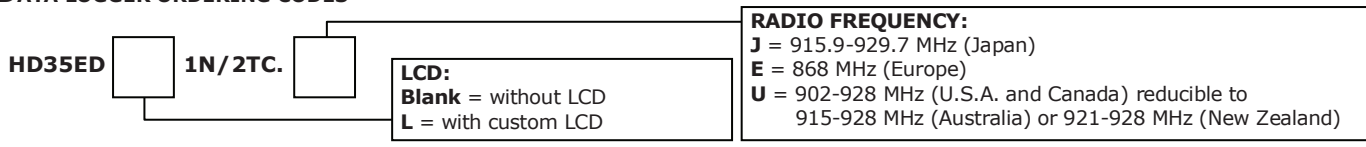
TP35N5...: stainless steel penetration temperature probe. NTC10KΩ @ 25 °C sensor. Operating temperature: -20...+105 °C. Dimensions: Ø 4 x 100 mm. 4-pole M12 connector.



TP35N5. [] / C []

3 = cable 3m, 5 = cable 5m

DATA LOGGER ORDERING CODES



HD35ED1N/2TCV – HD35EDL1N/2TCV

Temperature and humidity wireless data logger with T/RH fixed vertical probe, temperature only probe with cable



Temperature and humidity wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. One input with M12 connector for the temperature only probe with **NTC10K Ω** sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J) / 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 102 x 33 mm (excluding the probes)
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

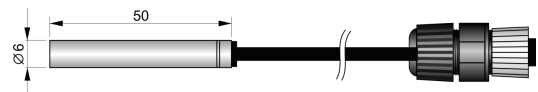
PROBES

TP35N1....: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+85 °C. Dimensions: $\varnothing 5$ x 40 mm. 4-pole M12 connector.



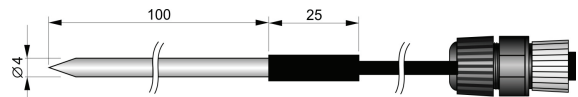
TP35N1. /C **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35N2....: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: 0...+70 °C. Dimensions $\varnothing 6$ x 50 mm. Double insulation. 4-pole M12 connector.



TP35N2. /C **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35N5....: stainless steel penetration temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+105 °C. Dimensions: $\varnothing 4$ x 100 mm. 4-pole M12 connector.



TP35N5. /C **3** = cable 3m, **5** = cable 5m

DATA LOGGER ORDERING CODES

HD35ED 1N/2TCV.

LCD:
Blank = without LCD
L = with custom LCD

RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)

E = 868 MHz (Europe)

U = 902-928 MHz (U.S.A. and Canada) reducible to
915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED14bNTC – HD35EDL14bNTC

Temperature, humidity and atmospheric pressure wireless data logger for T/RH combined probe with cable



Temperature, humidity and atmospheric pressure wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the **HP3517TC...** temperature and relative humidity combined probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

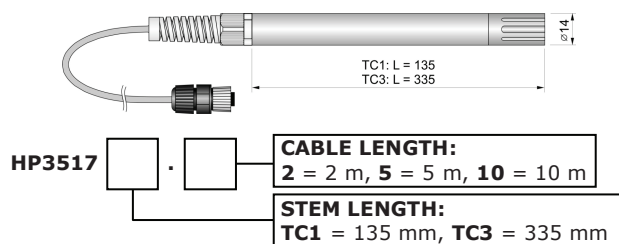
TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionyl chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 102 x 33 mm (excluding the probe)
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

HP3517TC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10K Ω @ 25 °C temperature sensor. 4-pole M12 connector.



DATA LOGGER ORDERING CODES



HD35ED14bNTV – HD35EDL14bNTV

Temperature, humidity and atmospheric pressure wireless data logger with T/RH fixed vertical probe



Temperature, humidity and atmospheric pressure wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with NTC10KΩ temperature sensor and **high accuracy R.H. sensor**. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

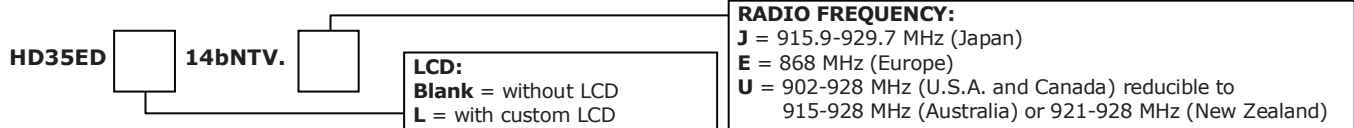
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	±2% over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 kΩ @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



HD35ED14bNTVI – HD35EDG14bNTVI

Temperature, humidity and atmospheric pressure wireless data logger with T/RH fixed vertical probe



Temperature, humidity and atmospheric pressure wireless data logger. Graphic LCD display (only with **option G**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with temperature sensor integrated in the R.H. module. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

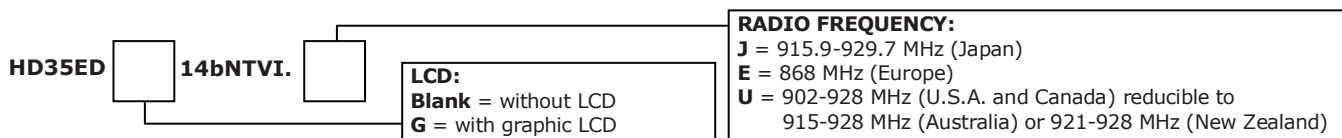
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0..80 % RH) ± [1.8 + 0.11 * (RH -80)] % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max=[100-2*(T-80)] @ T=80...105 °C)
Temperature drift	±2% over the whole operating temperature range
Long-term stability	0.5% / year
Temperature	
Sensor	Sensor integrated in humidity module
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.2 °C in the range 0...+60 °C ± (0.2 - 0.05 * T) °C in the range T=-40...0 °C ± [0.2 + 0.032 * (T-60)] °C in the range T=+60...+105 °C
Long-term stability	0.05 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



HD35ED1N4r...TV – HD35EDL1N4r...TV

Temperature, humidity and differential pressure wireless data logger with T/RH fixed vertical probe



Temperature, humidity and differential pressure wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. Pressure input for \varnothing 5 mm tubes.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

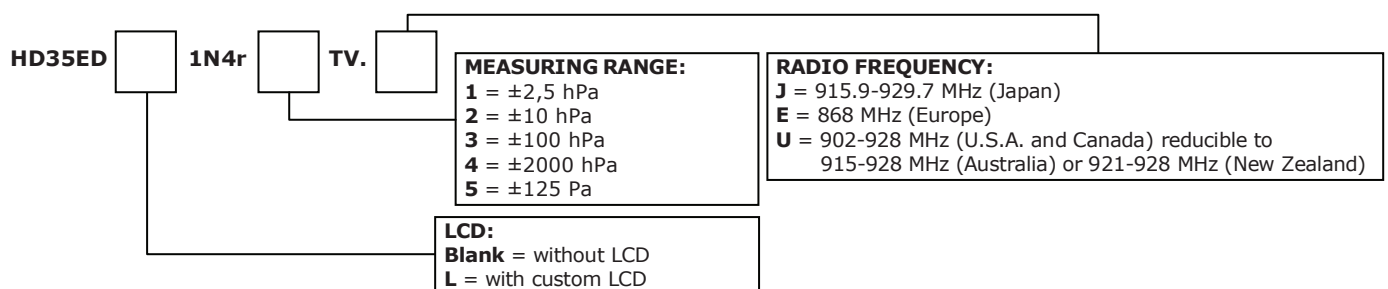
Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Diff. pressure	
Sensor	r1...r4: Piezo-resistive r5: thermal mass flow sensing element
Measuring range	r1: ± 2.5 hPa r2: ± 10 hPa r3: ± 100 hPa r4: ± 2000 hPa r5: ± 125 Pa (for clean rooms ^(*))
Resolution	r1: 0.001 hPa r2: 0.005 hPa r3: 0.05 hPa r4: 1 hPa r5: 0.01 Pa
Accuracy	r1...r4: $\pm 1\%$ f.s. r5: $\pm 3\%$ of reading, ± 0.1 Pa @ 0 Pa over the whole compensated temperature range (0...50 °C)
Connection	Tube \varnothing 5 mm (**)

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	r1...r4: 2 years typical (without repeaters, measurement interval 5 s and log interval 30 s) r5: 1.5 years typical (without repeaters, measurement and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

(*) The model r5 measures dynamic pressures (not suitable for the measurement of static pressures) and requires a small air flow between the two pressure inputs. Metal inputs with tube clamp ring to minimize pressure losses.

(**) In the model r5 it is recommended to use tubes with at least 5 mm internal diameter.

DATA LOGGER ORDERING CODES



HD35ED4r... – HD35EDL4r...

Differential pressure wireless data logger



Differential pressure wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (68,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Pressure input for \varnothing 5 mm tubes.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

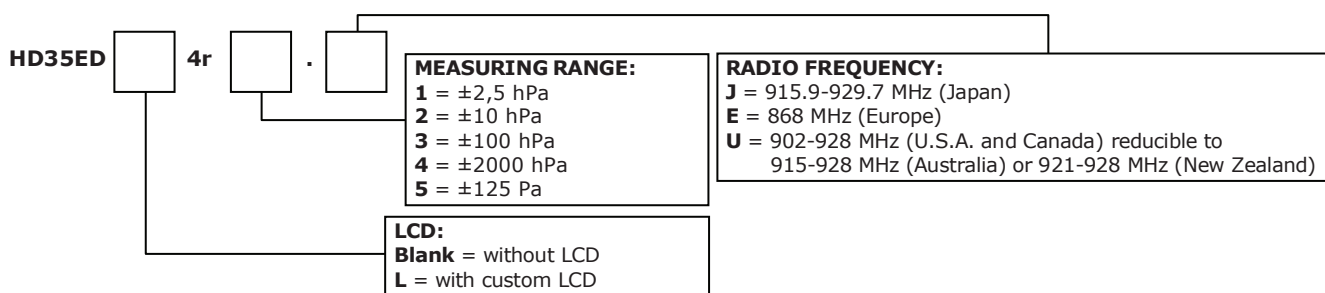
Diff. pressure	
Sensor	r1...r4: Piezo-resistive r5: thermal mass flow sensing element
Measuring range	r1: ± 2.5 hPa r2: ± 10 hPa r3: ± 100 hPa r4: ± 2000 hPa r5: ± 125 Pa (for clean rooms ^(*))
Resolution	r1: 0.001 hPa r2: 0.005 hPa r3: 0.05 hPa r4: 1 hPa r5: 0.01 Pa
Accuracy	r1...r4: $\pm 1\%$ f.s. r5: $\pm 3\%$ of reading, ± 0.1 Pa @ 0 Pa over the whole compensated temperature range (0...50 °C)
Connection	Tube \varnothing 5 mm ^(**)

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	r1...r4: 2 years typical (without repeaters, measurement interval 5 s and log interval 30 s) r5: 1.5 years typical (without repeaters, measurement and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 94 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

(*) The model r5 measures dynamic pressures (not suitable for the measurement of static pressures) and requires a small air flow between the two pressure inputs. Metal inputs with tube clamp ring to minimize pressure losses.

(**) In the model r5 it is recommended to use tubes with at least 5 mm internal diameter.

DATA LOGGER ORDERING CODES



HD35ED1NI...TCV – HD35EDL1NI...TCV

Temperature, humidity and illuminance wireless data logger



Temperature, humidity and illuminance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (44,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**.

One input with M12 connector for the **LP 35 PHOT** illuminance probe.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Illuminance	
Sensor	Photodiode
Measuring range	I: 0...20,000 lux I2: 0...200,000 lux
Resolution	I: 1 lux (0...2,000 lux), 10 lux (>2,000 lux) I2: 10 lux (0...20,000 lux), 100 lux (>20,000 lux)
Spectral range	According to standard photopic curve V(λ)
α (temperature coefficient) $f_6(T)$	<0.05% K
Calibration uncertainty	<4%
f_1 (according to photopic response V(λ))	<6%
f_2 (response as cosine law)	<3%
f_3 (linearity)	<1%
f_4 (instrument reading error)	<0.5%
f_5 (fatigue)	<0.5%
Class	B
One year drift	<1%
Operating temperature	0...50 °C
Reference standard	CIE n°69 – UNI 11142

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

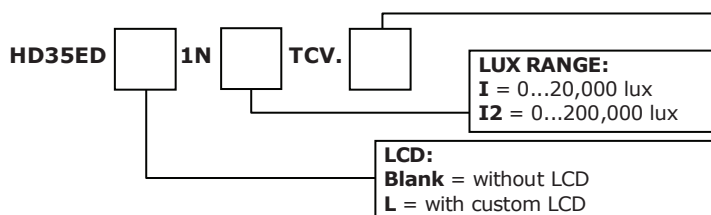
LP 35 PHOT: photometric probe for the measurement of illuminance, CIE photopic filter, spectral response in accordance with standard photopic vision, diffuser for cosine correction. Measurement range: 0...200,000 lux. Cable length 2m.

LP BL: base with level. On request, to be assembled to the probe upon ordering.

LP BL3: adjustable wall support.



DATA LOGGER ORDERING CODES



RADIO FREQUENCY:
J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED1NITV – HD35EDL1NITV

Temperature, humidity and illuminance wireless data logger



Temperature, humidity and illuminance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (44,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. Integrated illuminance probe.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

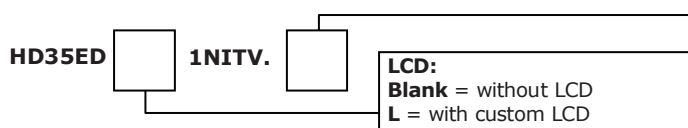
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Illuminance	
Sensor	Photodiode
Measuring range	0...20,000 lux
Resolution	1 lux (0...2,000 lux), 10 lux (>2,000 lux)
Spectral range	According to standard photopic curve V(λ)
α (temperature coefficient) $f_6(T)$	<0.05% K
Calibration uncertainty	<4%
f_1 (according to photopic response V(λ))	<6%
f_2 (response as cosine law)	<3%
f_3 (linearity)	<1%
f_4 (instrument reading error)	<0.5%
f_5 (fatigue)	<0.5%
Class	B
One year drift	<1%
Operating temperature	0...50 °C
Reference standard	CIE n°69 – UNI 11142

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED14bNI...TCV – HD35EDL14bNI...TCV

Temperature, humidity, atmospheric pressure and illuminance wireless data logger



Temperature, humidity, atmospheric pressure and illuminance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (36,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**.

One input with M12 connector for the **LP 35 PHOT** illuminance probe. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year
Illuminance	
Sensor	Photodiode
Measuring range	I: 0...20,000 lux, I2: 0...200,000 lux
Resolution	I: 1 lux (0...2,000 lux), 10 lux (>2,000 lux) I2: 10 lux (0...20,000 lux), 100 lux (>20,000 lux)
Spectral range	According to standard photopic curve V(λ)
α (temperature coefficient) $f_6(T)$	<0.05% K
Calibration uncertainty	<4%
f_1 (according to photopic response V(λ))	<6%
f_2 (response as cosine law)	<3%
f_3 (linearity)	<1%
f_4 (instrument reading error)	<0.5%
f_5 (fatigue)	<0.5%
Class	B
One year drift	<1%
Operating temperature	0...50 °C
Reference standard	CIE n°69 – UNI 11142

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

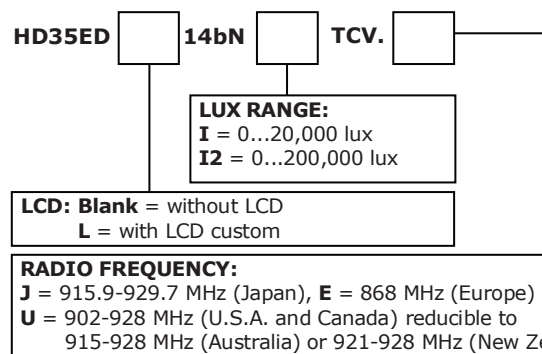
LP 35 PHOT: photometric probe for the measurement of illuminance, CIE photopic filter, spectral response in accordance with standard photopic vision, diffuser for cosine correction. Measurement range: 0...200,000 lux. Cable length 2m.

LP BL: base with level. On request, to be assembled to the probe upon ordering.

LP BL3: adjustable wall support.



DATA LOGGER ORDERING CODES



HD35ED14bNITV – HD35EDL14bNITV

Temperature, humidity, atmospheric pressure and illuminance wireless data logger



Temperature, humidity, atmospheric pressure and illuminance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (36,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. Integrated illuminance probe. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

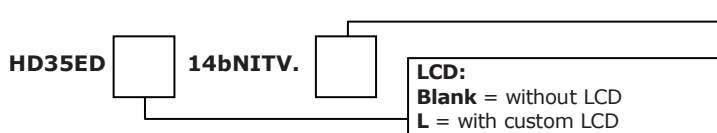
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year
Illuminance	
Sensor	Photodiode
Measuring range	0...20,000 lux
Resolution	1 lux (0...2,000 lux), 10 lux (>2,000 lux)
Spectral range	According to standard photopic curve V(λ)
α (temperature coefficient) $f_6(T)$	<0.05% K
Calibration uncertainty	<4%
f_1 (according to photopic response V(λ))	<6%
f_2 (response as cosine law)	<3%
f_3 (linearity)	<1%
f_4 (instrument reading error)	<0.5%
f_5 (fatigue)	<0.5%
Class	B
One year drift	<1%
Operating temperature	0...50 °C
Reference standard	CIE n°69 – UNI 11142

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:
J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED1NIUTCV – HD35EDL1NIUTCV

Temperature, humidity, illuminance and UVA irradiance wireless data logger



Temperature, humidity, illuminance and UVA irradiance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (32,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. One input with M12 connector for the **LP 35 P-A** illuminance and UVA irradiance combined probe.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure, proportion of UV present ($\mu\text{W/lumen}$).

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Illuminance	
Sensor	Photodiode
Measuring range	0...20,000 lux
Resolution	1 lux (0...2,000 lux), 10 lux (>2,000 lux)
Spectral range	According to standard photopic curve V(λ)
α (temperature coefficient) $f_6(T)$	<0.05% K
Calibration uncertainty	<4%
f_1 (according to photopic response V(λ))	<6%
f_2 (response as cosine law)	<3%
f_3 (linearity)	<1%
f_4 (instrument reading error)	<0.5%
f_5 (fatigue)	<0.5%
Class	B
One year drift	<1%
Operating temperature	0...50 °C
Reference standard	CIE n°69 - UNI 11142

UVA Irradiance	
Sensor	Photodiode
Measuring range	0...10,000 mW/m ²
Resolution	1 mW/m ² (0...2,000 mW/m ²) 5 mW/m ² (> 2,000 mW/m ²)
Spectral range	UVA, peak \approx 360 nm
Calibration uncertainty	<5%
f_2 (response as cosine law)	<6%
f_3 (linearity)	<1%
f_4 (instrument reading error)	± 1 digit
f_5 (fatigue)	<0.5%
One year drift	<2%
Operating temperature	0...50 °C
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

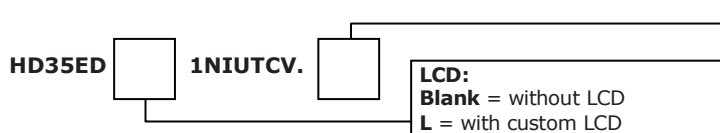
LP 35 P-A: 2-sensor combined probe for the measurement of illuminance, with standard photopic spectral response, and **UVA** irradiance in 315 nm...400 nm spectral range, diffuser for cosine correction. Measurement range: 1...10,000 mW/m². Cable length 2m.

LP BL: base with level. On request, to be assembled to the probe upon ordering.

LP BL3: adjustable wall support.



DATA LOGGER ORDERING CODES



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to
915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED1NIUTV – HD35EDL1NIUTV

Temperature, humidity, illuminance and UVA irradiance wireless data logger



Temperature, humidity, illuminance and UVA irradiance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (32,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**.

Integrated illuminance and UVA irradiance combined probe.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure, proportion of UV present ($\mu\text{W/lumen}$).

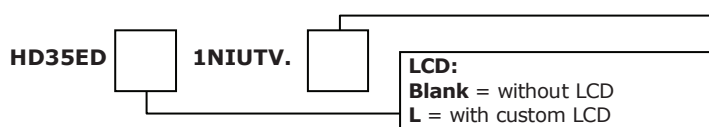
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Illuminance	
Sensor	Photodiode
Measuring range	0...20,000 lux
Resolution	1 lux (0...2,000 lux), 10 lux (>2,000 lux)
Spectral range	According to standard photopic curve $V(\lambda)$
α (temperature coefficient) $f_6(T)$	<0.05% K
Calibration uncertainty	<4%
f_1 (according to photopic response $V(\lambda)$)	<6%
f_2 (response as cosine law)	<3%
f_3 (linearity)	<1%
f_4 (instrument reading error)	<0.5%
f_5 (fatigue)	<0.5%
Class	B
One year drift	<1%
Operating temperature	0...50 °C
Reference standard	CIE n°69 – UNI 11142

UVA Irradiance	
Sensor	Photodiode
Measuring range	0...10,000 mW/m ²
Resolution	1 mW/m ² (0...2,000 mW/m ²) 5 mW/m ² (> 2,000 mW/m ²)
Spectral range	UVA, peak ≈ 360 nm
Calibration uncertainty	<5%
f_2 (response as cosine law)	<6%
f_3 (linearity)	<1%
f_4 (instrument reading error)	± 1 digit
f_5 (fatigue)	<0.5%
One year drift	<2%
Operating temperature	0...50 °C
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to
915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED1NUBTCV – HD35EDL1NUBTCV

Temperature, humidity and UVB irradiance wireless data logger



Temperature, humidity and UVB irradiance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (44,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. One input with M12 connector for the **LP 35 UVB** irradiance probe.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
UVB Irradiance	
Sensor	Photodiode
Measuring range	0...100 W/m ²
Resolution	0.01 W/m ² (0...10 W/m ²) 0.1 W/m ² (10...100 W/m ²)
Spectral range	UVB, peak \approx 305 nm
Calibration uncertainty	<5%
f ₂ (response as cosine law)	<6%
f ₃ (linearity)	<2%
f ₄ (instrument reading error)	± 1 digit
f ₅ (fatigue)	<0.5%
One year drift	<2%
Operating temperature	0...50 °C

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

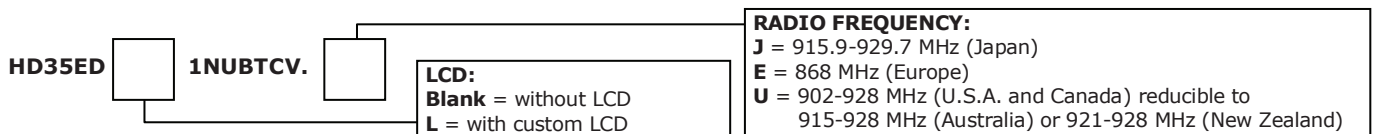
LP 35 UVB: probe for the measurement of **UVB** irradiance in 280 nm...315 nm spectral range, diffuser for cosine correction. Measurement range: $1 \cdot 10^{-3}$...100 W/m². Cable length 2m.

LP BL: base with level. On request, to be assembled to the probe upon ordering.

LP BL3: adjustable wall support.



DATA LOGGER ORDERING CODES



HD35ED1NUCTCV – HD35EDL1NUCTCV

Temperature, humidity and UVC irradiance wireless data logger



Temperature, humidity and UVC irradiance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (44,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. One input with M12 connector for the **LP 35 UVC** irradiance probe.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
UVC Irradiance	
Sensor	Photodiode
Measuring range	0...100 W/m ²
Resolution	0.01 W/m ² (0...10 W/m ²) 0.1 W/m ² (10...100 W/m ²)
Spectral range	UVC, peak \cong 260 nm
Calibration uncertainty	<5%
f ₂ (response as cosine law)	<6%
f ₃ (linearity)	<1%
f ₄ (instrument reading error)	± 1 digit
f ₅ (fatigue)	<0.5%
One year drift	<2%
Operating temperature	0...50 °C

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

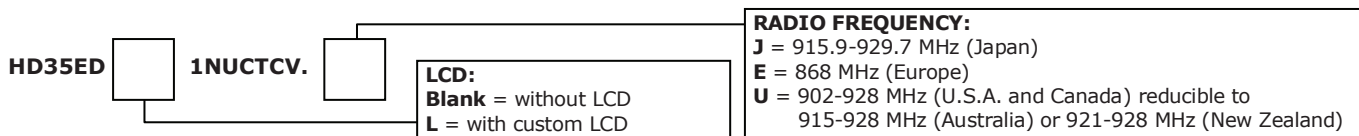
LP 35 UVC: probe for the measurement of **UVC** irradiance in 220 nm...280 nm spectral range, diffuser for cosine correction. Measurement range: $1 \cdot 10^{-3}$...100 W/m². Cable length 2m.

LP BL: base with level. On request, to be assembled to the probe upon ordering.

LP BL3: adjustable wall support.



DATA LOGGER ORDERING CODES



HD35ED14bNIUTCV – HD35EDL14bNIUTCV

Temperature, humidity, atmospheric pressure, illuminance and UVA irradiance wireless data logger



Temperature, humidity, atmospheric pressure, illuminance and UVA irradiance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (32,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. One input with M12 connector for the **LP 35 P-A** illuminance and UVA irradiance combined probe. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure, proportion of UV present ($\mu\text{W/lumen}$).

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year
Illuminance	
Sensor	Photodiode
Measuring range	0...20,000 lux
Resolution	1 lux (0...2,000 lux), 10 lux (>2,000 lux)
Spectral range	According to standard photopic curve $V(\lambda)$
α (temperature coefficient) $f_6(T)$	<0.05% K
Calibration uncertainty	<4%
f_1 (according to photopic response $V(\lambda)$)	<6%
f_2 (response as cosine law)	<3%
f_3 (linearity)	<1%
f_4 (instrument reading error)	<0.5%
f_5 (fatigue)	<0.5%
Class	B
One year drift	<1%
Operating temperature	0...50 °C
Reference standard	CIE n°69 – UNI 11142

UVA Irradiance	
Sensor	Photodiode
Measuring range	0...10,000 mW/m ²
Resolution	1 mW/m ² (0...2,000 mW/m ²) 5 mW/m ² (> 2,000 mW/m ²)
Spectral range	UVA, peak ≈ 360 nm
Calibration uncertainty	<5%
f_2 (response as cosine law)	<6%
f_3 (linearity)	<1%
f_4 (instrument reading error)	± 1 digit
f_5 (fatigue)	<0.5%
One year drift	<2%
Operating temperature	0...50 °C
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

PROBES

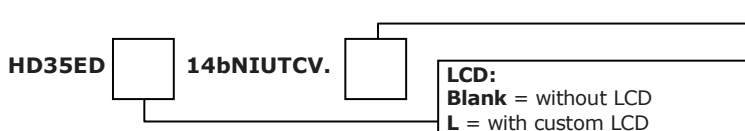
LP 35 P-A: 2-sensor combined probe for the measurement of illuminance, with standard photopic spectral response, and **UVA** irradiance in 315 nm...400 nm spectral range, diffuser for cosine correction. Measurement range: 0...20,000 mW/m². Cable length 2m.

LP BL: base with level. On request, to be assembled to the probe upon ordering.

LP BL3: adjustable wall support.



DATA LOGGER ORDERING CODES



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to
915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35ED14bNIUTV – HD35EDL14bNIUTV

Temperature, humidity, atmospheric pressure, illuminance and UVA irradiance wireless data logger



Temperature, humidity, atmospheric pressure, illuminance and UVA irradiance wireless data logger. Custom LCD display (only with **option L**). It stores the measures in its internal memory (32,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. Integrated illuminance and UVA irradiance combined probe. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure, proportion of UV present ($\mu\text{W/lumen}$).

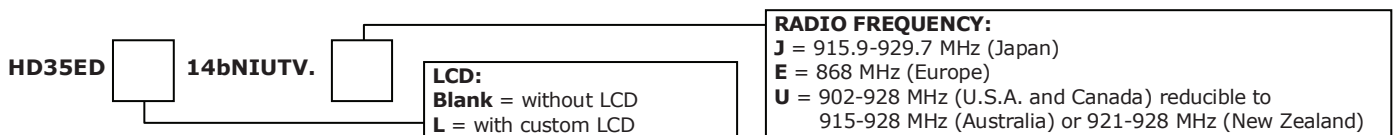
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year
Illuminance	
Sensor	Photodiode
Measuring range	0...20,000 lux
Resolution	1 lux (0...2,000 lux), 10 lux (>2,000 lux)
Spectral range	According to standard photopic curve V(λ)
α (temperature coefficient) $f_6(T)$	<0.05% K
Calibration uncertainty	<4%
f_1 (according to photopic response V(λ))	<6%
f_2 (response as cosine law)	<3%
f_3 (linearity)	<1%
f_4 (instrument reading error)	<0.5%
f_5 (fatigue)	<0.5%
Class	B
One year drift	<1%
Operating temperature	0...50 °C
Reference standard	CIE n°69 – UNI 11142

UVA Irradiance	
Sensor	Photodiode
Measuring range	0...10,000 mW/m ²
Resolution	1 mW/m ² (0...2,000 mW/m ²) 5 mW/m ² (> 2,000 mW/m ²)
Spectral range	UVA, peak \approx 360 nm
Calibration uncertainty	<5%
f_2 (response as cosine law)	<6%
f_3 (linearity)	<1%
f_4 (instrument reading error)	± 1 digit
f_5 (fatigue)	<0.5%
One year drift	<2%
Operating temperature	0...50 °C
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 144 x 33 mm
Weight	200 g approx.
Housing	ABS
Protection degree	IP 64

DATA LOGGER ORDERING CODES



HD35ED1NB – HD35EDG1NB

Temperature, humidity and carbon dioxide (CO₂) wireless data logger



Temperature, humidity and carbon dioxide wireless data logger. Graphic LCD display (only with **option G**). It stores the measures in its internal memory (44,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

The sensors are all inside the housing.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0.80 % RH) ± [1.8 + 0.11 * (RH -80)] % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max=[100-2*(T-80)] @ T=80...105 °C)
Temperature drift	±2% over the whole operating temperature range
Long-term stability	0.5% / year
Temperature	
Sensor	Sensor integrated in humidity module
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.2 °C in the range 0...+60 °C ± (0.2 - 0.05 * T) °C in the range T=-40...0 °C ± [0.2 + 0.032 * (T-60)] °C in the range T=+60...+105 °C
Long-term stability	0.05 °C / year
Carbon dioxide (CO ₂)	
Sensor	Non-dispersive infrared rays (NDIR)
Measuring range	0...5000 ppm
Resolution	1 ppm
Accuracy	±(50 ppm+3% of measurement) @ 20 °C and 1013 hPa
Operating temperature	-5...50 °C
Response time	T ₉₀ < 120 s (air speed= 2 m/s)
Stability	5% of measurement/5 years
Temperature drift	0.1% f.s. / °C

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	1.5 years typical (without repeaters, measurement and log interval 2 min)
Operating conditions	-10...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Housing	ABS

DATA LOGGER ORDERING CODES



HD35ED1NAB – HD35EDG1NAB

Temperature, humidity, carbon monoxide (CO) and carbon dioxide (CO₂) wireless data logger



Temperature, humidity, carbon monoxide and dioxide wireless data logger. Graphic LCD display (only with **option G**). It stores the measures in its internal memory (36,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

The sensors are all inside the housing.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

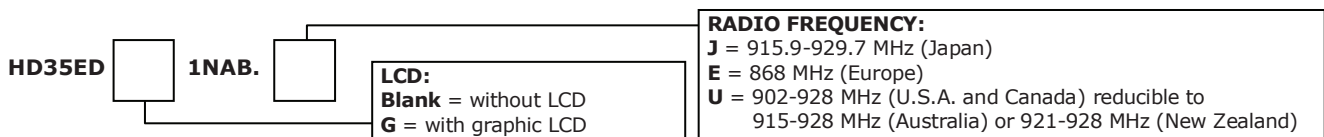
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0..80 % RH) ± [1.8 + 0.11 * (RH - 80)] % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max=[100-2*(T-80)] @ T=80...105 °C)
Temperature drift	±2% over the whole operating temperature range
Long-term stability	0.5% / year
Temperature	
Sensor	Sensor integrated in humidity module
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.2 °C in the range 0...+60 °C ± (0.2 - 0.05 * T) °C in the range T=-40...0 °C ± [0.2 + 0.032 * (T-60)] °C in the range T=+60...+105 °C
Long-term stability	0.05 °C / year
Carbon monoxide (CO)	
Sensor	Electrochemical cell
Measuring range	0 ... 500 ppm
Resolution	1 ppm
Accuracy	±3 ppm+3% of measurement
Operating temp.	-5...50 °C
Response time	T ₉₀ < 50 s
Stability	5% of measurement /year
Sensor life	> 5 years in normal environmental conditions

Carbon dioxide (CO ₂)	
Sensor	Non-dispersive infrared rays (NDIR)
Measuring range	0...5000 ppm
Resolution	1 ppm
Accuracy	±(50 ppm+3% of measurement) @ 20 °C and 1013 hPa
Operating temperature	-5...50 °C
Response time	T ₉₀ < 120 s (air speed= 2 m/s)
Stability	5% of measurement/5 years
Temperature drift	0.1% f.s. / °C
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	1.5 years typical (without repeaters, measurement and log interval 2 min)
Operating conditions	-10...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Housing	ABS

DATA LOGGER ORDERING CODES



HD35ED14bNAB – HD35EDG14bNAB

Temperature, humidity, atmospheric pressure, carbon monoxide (CO) and carbon dioxide (CO₂) wireless data logger



Temperature, humidity, atmospheric pressure, carbon monoxide and dioxide wireless data logger. Graphic LCD display (only with **option G**). It stores the measures in its internal memory (32,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

The sensors are all inside the housing.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

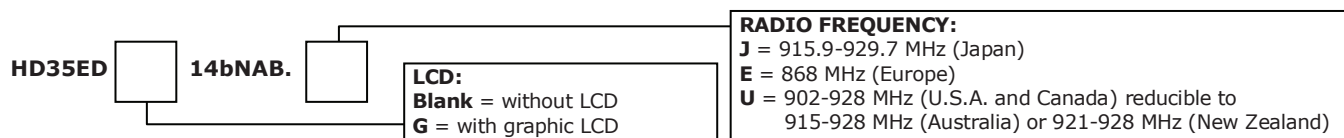
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0.80 % RH) ± [1.8 + 0.11 * (RH - 80)] % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max=[100-2*(T-80)] @ T=80...105 °C)
Temperature drift	±2% over the whole operating temperature range
Long-term stability	0.5% / year
Temperature	
Sensor	Sensor integrated in humidity module
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.2 °C in the range 0...+60 °C ± (0.2 - 0.05 * T) °C in the range T=-40...0 °C ± [0.2 + 0.032 * (T-60)] °C in the range T=+60...+105 °C
Long-term stability	0.05 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year
Carbon monoxide (CO)	
Sensor	Electrochemical cell
Measuring range	0 ... 500 ppm
Resolution	1 ppm
Accuracy	±3 ppm+3% of measurement
Operating temp.	-5...50 °C
Response time	T ₉₀ < 50 s
Stability	5% of measurement /year
Sensor life	> 5 years in normal environmental conditions

Carbon dioxide (CO ₂)	
Sensor	Non-dispersive infrared rays (NDIR)
Measuring range	0...5000 ppm
Resolution	1 ppm
Accuracy	±(50 ppm+3% of measurement) @ 20 °C and 1013 hPa
Operating temperature	-5...50 °C
Response time	T ₉₀ < 120 s (air speed= 2 m/s)
Stability	5% of measurement/5 years
Temperature drift	0.1% f.s. / °C
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	1.5 years typical (without repeaters, measurement and log interval 2 min)
Operating conditions	-10...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Housing	ABS

DATA LOGGER ORDERING CODES



HD35ED-ALM

Wireless alarm module



Wireless module with two relay outputs for signalling alarm events. Acoustic alarm with internal buzzer. It allows to activate more signalling devices (sirens, blinking lights, etc.) or actuators.

Bistable relays with potential-free contact

Configuration via **HD35AP-S** software. Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

TECHNICAL CHARACTERISTICS

Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	300 m (E, J)/ 180 m (U) in open field (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	1 year in typical operating conditions. The effective life depends on how often the alarm condition is generated
Relays	2 bistable relays with potential-free contact. Contact: max 1A @ 30Vdc resistive load
Buzzer	Sounds cyclically when an alarm condition occurs: 1 single beep indicates that relay 1 is active; 2 beeps in rapid succession indicate that relay 2 is active; 3 beeps in rapid succession indicate that both relays are active.
Operating conditions	-10...+70 °C / 0...85 %RH non condensing
Dimensions	135 x 110 x 33 mm
Weight	200 g approx.
Housing	ABS

ORDERING CODES

HD35ED-ALM.



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)

E = 868 MHz (Europe)

U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35EDW7P/...TC – HD35EDLW7P/...TC

Waterproof 1, 2 or 3-input temperature wireless data logger for Pt100/Pt1000 sensor temperature probes with cable



Temperature wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (from 42,000 to 68,000 samples depending on the number of inputs) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Depending on the model, one, two or three inputs with M12 connector for temperature probes with **Pt100/Pt1000** sensor:

HD35EDW7P/1 – HD35EDLW7P/1: one input (68,000 samples)

HD35EDW7P/2 – HD35EDLW7P/2: two inputs (52,000 samples)

HD35EDW7P/3 – HD35EDLW7P/3: three inputs (42,000 samples)

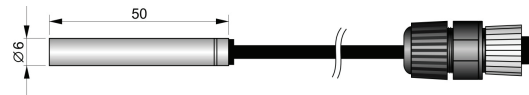
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Temperature	
Sensor	Pt100 / Pt1000 1/3 DIN thin film
Measuring range	-100...+350 °C (the measuring range can be limited by the operating temperature of the used probe)
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

PROBES

TP35.1...: stainless steel temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: -50...+105 °C. Dimensions: \varnothing 6 x 50 mm. 4-pole M12 connector.



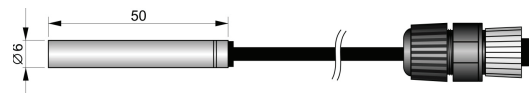
TP35.1. /C **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35.2...: thermoplastic rubber temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: 0...+70 °C. Dimensions \varnothing 5 x 20 mm. 4-pole M12 connector.



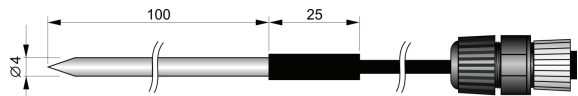
TP35.2. /C **3** = cable 3m, **5** = cable 5m

TP35.4...: stainless steel temperature probe. 4-wire 1/3 DIN Pt100 sensor. Operating temperature: -50...+105 °C. Dimensions: \varnothing 6 x 50 mm. 4-pole M12 connector.



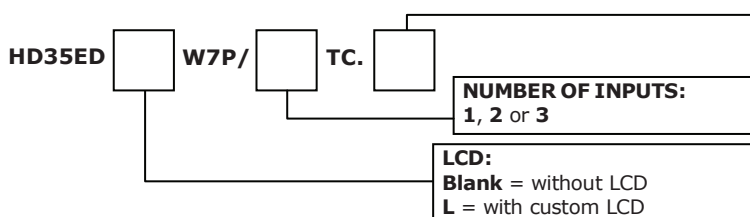
TP35.4. /C **3** = cable 3m, **5** = cable 5m, **10** = cable

TP35.5...: stainless steel penetration temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: -40...+300 °C. Dimensions: \varnothing 4 x 100 mm. 4-pole M12 connector.



TP35.5. /C **3** = cable 3m, **5** = cable 5m

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)

E = 868 MHz (Europe)

U = 902-928 MHz (U.S.A. and Canada) reducible to

915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35EDWN/...TC – HD35EDLWN/...TC

Waterproof, 1, 2 or 3-input temperature wireless data logger for NTC sensor temperature probes with cable



Temperature wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (from 42,000 to 68,000 samples depending on the number of inputs) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Depending on the model, one, two or three inputs with M12 connector for temperature probes with **NTC10K Ω** sensor:

HD35EDWN/1 – HD35EDLWN/1: one input (68,000 samples)

HD35EDWN/2 – HD35EDLWN/2: two inputs (52,000 samples)

HD35EDWN/3 – HD35EDLWN/3: three inputs (42,000 samples)

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C (the measuring range can be limited by the operating temperature of the used probe)
Resolution	0.1 °C
Accuracy	\pm 0.3 °C in the range 0...+70 °C \pm 0.4 °C outside
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

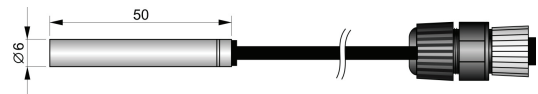
PROBES

TP35N1....: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+85 °C. Dimensions: \varnothing 5 x 40 mm. 4-pole M12 connector.



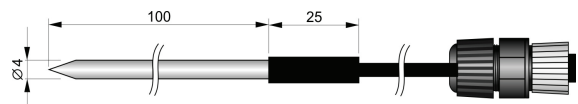
TP35N1. /C **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35N2....: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: 0...+70 °C. Dimensions \varnothing 6 x 50 mm. Double insulation. 4-pole M12 connector.



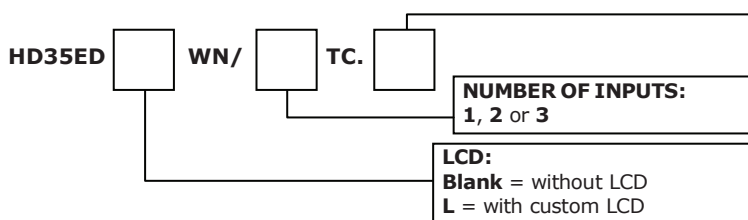
TP35N2. /C **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35N5....: stainless steel penetration temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+105 °C. Dimensions: \varnothing 4 x 100 mm. 4-pole M12 connector.



TP35N5. /C **3** = cable 3m, **5** = cable 5m

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)

E = 868 MHz (Europe)

U = 902-928 MHz (U.S.A. and Canada) reducible to

915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35EDWNTV – HD35EDLWNTV

Waterproof temperature wireless data logger with fixed vertical probe



Temperature wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (68,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature fixed vertical probe with **NTC10K Ω** temperature sensor.

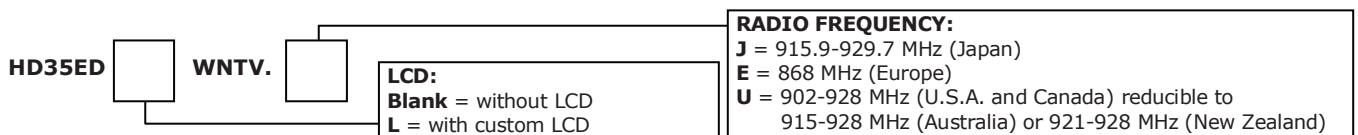
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Temperature	
Sensor	Pt100 / Pt1000 1/3 DIN thin film
Measuring range	-100...+350 °C (the measuring range can be limited by the operating temperature of the used probe)
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	170 x 80 x 55 mm (excluding external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



HD35EDWNTV61 – HD35EDLWNTV61

Waterproof temperature wireless data logger with fixed vertical probe



Temperature wireless data logger for freezing tunnels. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (68,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature fixed vertical probe with **NTC10K Ω** temperature sensor. Stainless steel tube.

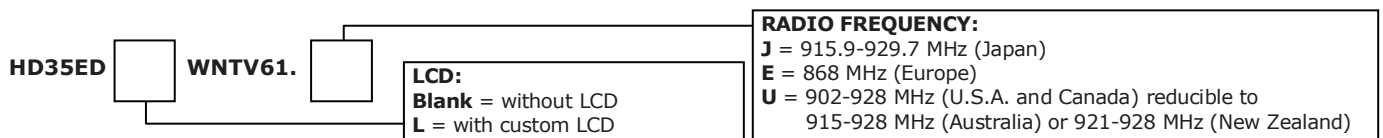
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Temperature	
Sensor	Pt100 / Pt1000 1/3 DIN thin film
Measuring range	-100...+350 °C (the measuring range can be limited by the operating temperature of the used probe)
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionyl chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	170 x 80 x 55 mm (excluding external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



HD35EDWK/4TC – HD35EDLWK/4TC

Waterproof 4-input temperature wireless data logger for thermocouple temperature probes



Temperature wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (from 36.000 to 68.000 samples depending on the number of inputs used) and transmits the logged data to the base unit automatically at regular intervals or upon request.

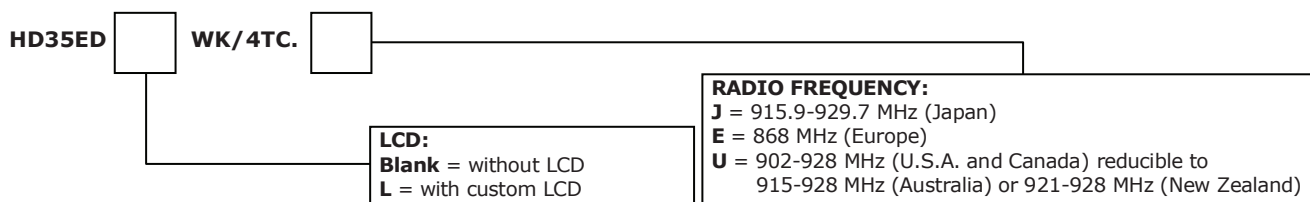
Four inputs with connector for **K-J-T-N-E thermocouple** temperature probes.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Temperature	
Sensor	K-J-T-N-E thermocouple The inputs are not isolated, use thermocouples with isolated hot junction
Measuring range	K: -200...+1370 °C J: -100...+750 °C E: -200...+750 °C T: -200...+400 °C N: -200...+1300 °C
Resolution	0.1 °C
Accuracy (excluding probe error)	K: $\pm 0.1^\circ\text{C}$ (< 600°C) E: $\pm 0.1^\circ\text{C}$ (< 300°C) $\pm 0.2^\circ\text{C}$ (> 600°C) $\pm 0.2^\circ\text{C}$ (> 300°C) N: $\pm 0.1^\circ\text{C}$ (< 600°C) J: $\pm 0.1^\circ\text{C}$ $\pm 0.2^\circ\text{C}$ (> 600°C) T: $\pm 0.1^\circ\text{C}$
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, C format, 2-pole Molex 5264 connector
Battery life	4 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	120 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



HD35EDW1TV – HD35EDLW1TV

Waterproof humidity wireless data logger with fixed vertical probe



Humidity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (68,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Relative humidity fixed vertical probe with **high accuracy R.H. sensor**.

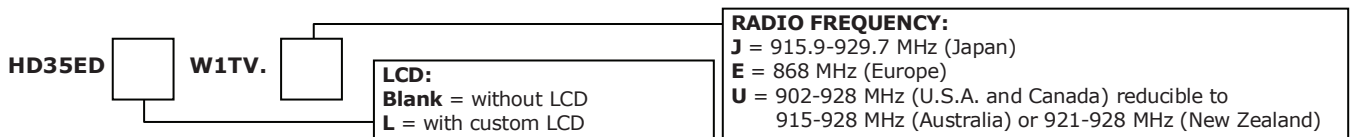
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	±2% over the whole operating temperature range
Long-term stability	1% / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	170 x 80 x 55 mm (excluding external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



HD35EDW1TVI – HD35EDLW1TVI

Waterproof humidity wireless data logger with fixed vertical probe



Humidity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (68,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Relative humidity fixed vertical probe.

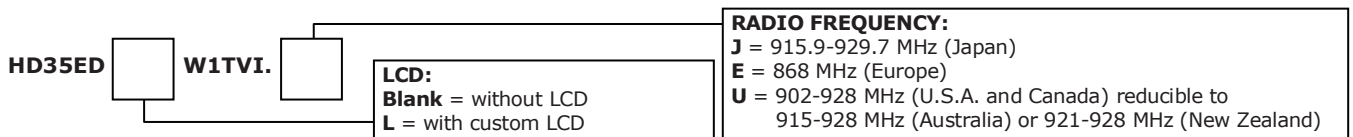
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0..80 % RH) $\pm [1.8 + 0.11 * (RH - 80)]$ % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max=[100-2*(T-80)] @ T=80...105 °C)
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	0.5% / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	170 x 80 x 55 mm (excluding external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



HD35EDW1NTC – HD35EDLW1NTC

Waterproof temperature and humidity wireless data logger for T/RH combined probe with cable



Temperature and humidity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the **HP3517TC...** temperature and relative humidity combined probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

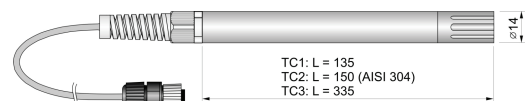
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probe and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

PROBES

HP3517TC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10K Ω @ 25 °C temperature sensor. 4-pole M12 connector.



HP3517

CABLE LENGTH:

2 = 2 m, 5 = 5 m, 10 = 10 m

STEM LENGTH:

TC1=135mm, TC2=150mm, TC3=335mm

TP35N1...: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+85 °C. Dimensions: \varnothing 5 x 40 mm. 4-pole M12 connector.

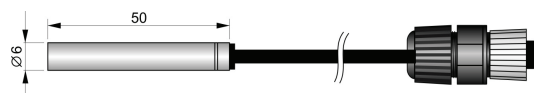


TP35N1.

/C

3 = cable 3m, 5 = cable 5m, 10 = cable 10m

TP35N2...: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: 0...+70 °C. Dimensions \varnothing 6 x 50 mm. Double insulation. 4-pole M12 connector.

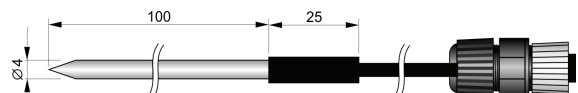


TP35N2.

/C

3 = cable 3m, 5 = cable 5m, 10 = cable 10m

TP35N5...: stainless steel penetration temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+105 °C. Dimensions: \varnothing 4 x 100 mm. 4-pole M12 connector.



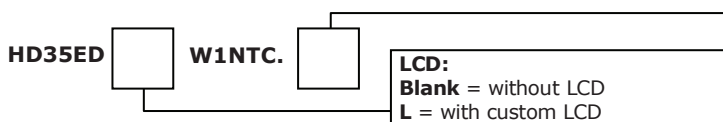
TP35N5.

/C

3 = cable 3m, 5 = cable 5m

Note: connecting a temperature only probe, the humidity measurements will be in error.

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:

J = 915.9-929.7 MHz (Japan)

E = 868 MHz (Europe)

U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35EDW17PTC – HD35EDLW17PTC

Waterproof temperature and humidity wireless data logger for T/RH combined probe with cable



Temperature and humidity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the **HP3517ETC...** temperature and relative humidity combined probe with **Pt100** temperature sensor and **high accuracy R.H. sensor**.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

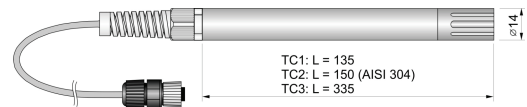
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-40...+150 °C
Temperature drift	±2% over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	Thin film 1/3 DIN Pt100
Measuring range	-40...+150 °C
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probe and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

PROBES

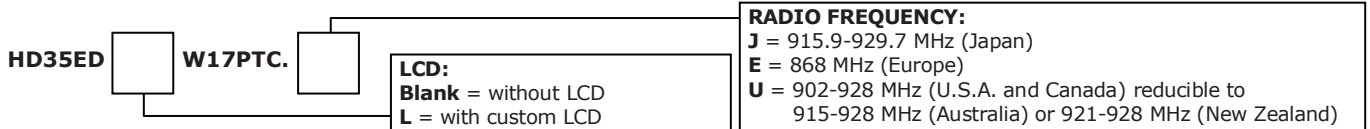
HP3517ETC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and Pt100 temperature sensor. 4-pole M12 connector.



HP3517E . **CABLE LENGTH:**
2 = 2 m, 5 = 5 m, 10 = 10 m

STEM LENGTH:
TC1=135mm, TC2=150mm, TC3=335mm

DATA LOGGER ORDERING CODES



HD35EDW1NTV – HD35EDLW1NTV

Waterproof temperature and humidity wireless data logger with T/RH fixed vertical probe



Temperature and humidity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

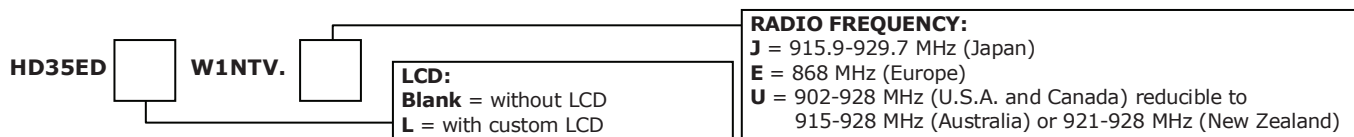
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	170 x 80 x 55 mm (excluding external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



HD35EDW1NTVI – HD35EDLW1NTVI

Waterproof temperature and humidity wireless data logger with T/RH fixed vertical probe



Temperature and humidity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Temperature and relative humidity fixed vertical probe with temperature sensor integrated in the R.H. module.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0..80 % RH) $\pm [1.8 + 0.11 * (RH - 80)]$ % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max= $[100-2*(T-80)]$ @ T=80...105 °C)
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	0.5% / year
Temperature	
Sensor	Sensor integrated in humidity module
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.2 °C in the range 0...+60 °C $\pm (0.2 - 0.05 * T)$ °C in the range T=-40...0 °C $\pm [0.2 + 0.032 * (T-60)]$ °C in the range T=+60...+105 °C
Long-term stability	0.05 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	170 x 80 x 55 mm (excluding external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



HD35EDW1N/2TC – HD35EDLW1N/2TC

Waterproof temperature and humidity wireless data logger for T/RH combined probe and temperature probe with cable



Temperature and humidity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Two inputs with M12 connector for the **HP3517TC...** temperature and relative humidity combined probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**, and for the temperature only probe with **NTC10K Ω** sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

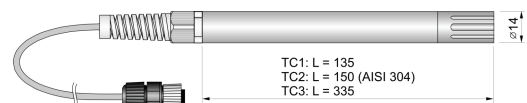
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J) / 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

PROBES

HP3517TC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10K Ω @ 25 °C temperature sensor. 4-pole M12 connector.



HP3517 [] / [] **CABLE LENGTH:**
2 = 2 m, 5 = 5 m, 10 = 10 m

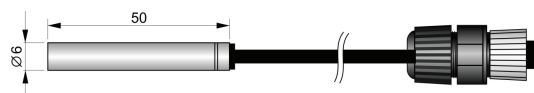
STEM LENGTH:
TC1=135mm, TC2=150mm, TC3=335mm

TP35N1...: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+85 °C. Dimensions: \varnothing 5 x 40 mm. 4-pole M12 connector.



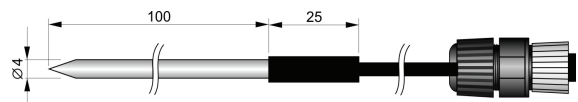
TP35N1. [] / [] **3 = cable 3m, 5 = cable 5m, 10 = cable 10m**

TP35N2...: stainless steel temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: 0...+70 °C. Dimensions \varnothing 6 x 50 mm. Double insulation. 4-pole M12 connector.



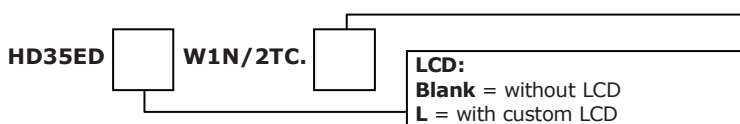
TP35N2. [] / [] **3 = cable 3m, 5 = cable 5m, 10 = cable 10m**

TP35N5...: stainless steel penetration temperature probe. NTC10K Ω @ 25 °C sensor. Operating temperature: -20...+105 °C. Dimensions: \varnothing 4 x 100 mm. 4-pole M12 connector.



TP35N5. [] / [] **3 = cable 3m, 5 = cable 5m**

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:

J = 915,9-929,7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to
915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35EDW14bNTC – HD35EDLW14bNTC

Waterproof temperature, humidity and atmospheric pressure wireless data logger, for T/RH combined probe with cable



Temperature, humidity and atmospheric pressure wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the **HP3517TC...** temperature and relative humidity combined probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

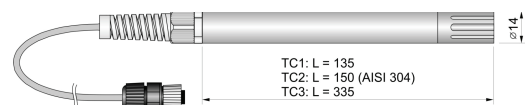
TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temp. range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C (0...+70 °C) / ± 0.4 °C (outside)
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J) / 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probe and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

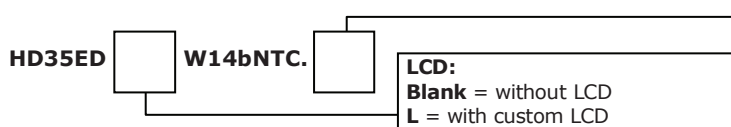
PROBES

HP3517TC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10K Ω @ 25 °C temperature sensor. 4-pole M12 connector.



HP3517	·	CABLE LENGTH: 2 = 2 m, 5 = 5 m, 10 = 10 m

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:
J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)

HD35EDW14b7PTC – HD35EDLW14b7PTC

Waterproof temperature, humidity and atmospheric pressure wireless data logger, for T/RH combined probe with cable



Temperature, humidity and atmospheric pressure wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the **HP3517ETC...** temperature and relative humidity combined probe with **Pt100** temperature sensor and **high accuracy R.H. sensor**. Integrated pressure sensor.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

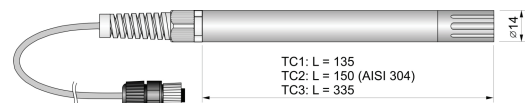
TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-40...+150 °C
Temperature drift	±2% over the whole operating temp. range
Long-term stability	1% / year
Temperature	
Sensor	Thin film 1/3 DIN Pt100
Measuring range	-40...+150 °C
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probe and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

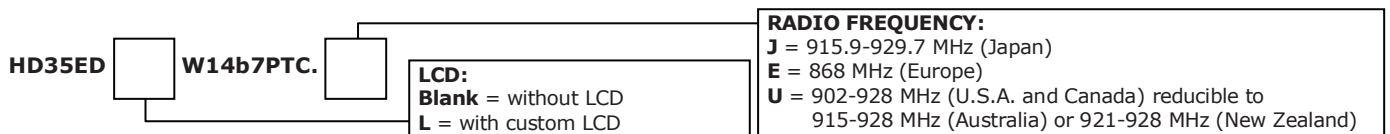
PROBES

HP3517ETC...: temperature and relative humidity combined probe with high accuracy R.H. sensor and Pt100 temperature sensor. 4-pole M12 connector.



HP3517E . **CABLE LENGTH:**
2 = 2 m, 5 = 5 m, 10 = 10 m
STEM LENGTH:
TC1=135mm, TC2=150mm, TC3=335mm

DATA LOGGER ORDERING CODES



HD35EDW1NV – HD35EDLW1NV

Waterproof temperature, humidity and acceleration wireless data logger



Temperature, humidity and acceleration wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory and transmits the logged data to the base unit automatically at regular intervals or upon request.

The sensors are all internal. Temperature sensor integrated in the relative humidity module. Gore-Tex® air intake.

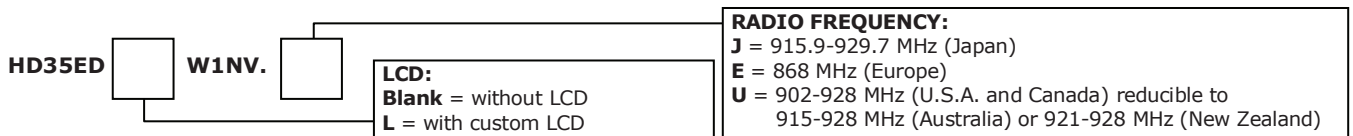
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.8 %RH (0..80 % RH) $\pm [1.8 + 0.11 * (RH - 80)]$ % RH (remaining range)
Sensor operating temperature	-40...+105 °C (R.H. max= $[100-2*(T-80)]$ @ T=80...105 °C)
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	0.5% / year
Temperature	
Sensor	Sensor integrated in humidity module
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.2 °C in the range 0...+60 °C $\pm (0.2 - 0.05 * T)$ °C in the range T=-40...0 °C $\pm [0.2 + 0.032 * (T-60)]$ °C in the range T=+60...+105 °C
Long-term stability	0.05 °C / year
Acceleration	
Sensor	Triaxial Accelerometer
Measuring range	0...16 g
Resolution	< 0.05 g (function of measured value)
Accuracy	< 0.1 g (function of measured value)

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-10...+60 °C / 0...100 %RH non condensing
Dimensions	120 x 80 x 55 mm (excluding external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



HD35EDWRTC – HD35EDLWRTC

Waterproof solar radiation wireless data logger



Solar radiation wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (42,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the pyranometer.

Calculated quantities: daily solar radiation in Wh/m² (Wh = watt hour).

The pyranometer mV signal is also displayed.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a Ø 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Solar radiation	
Sensor	Thermopile
Measuring range	0...2000 W/m ²
Resolution	1 W/m ²
Sensitivity	Configurable in mV/(kW m ⁻²)
<i>Note: for the other characteristics, please refer to the data sheet of the chosen pyranometer.</i>	
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

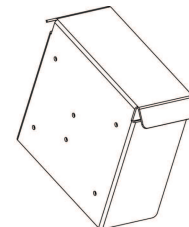
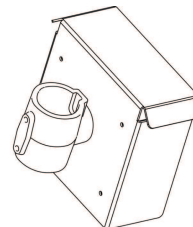
PYRANOMETERS

LP PYRA 02 First Class pyranometer according to ISO 9060. Output in µV/(Wm⁻²). Supplied with: shade disk, cartridge with silica-gel crystals, 2 spare sachets, levelling device, connector and Calibration Report. **On request 5 or 10m cables with connector.**

LP PYRA 03 Second Class pyranometer according to ISO 9060. Output in µV/(Wm⁻²). Supplied with levelling device, connector and Calibration Report. **On request 5 or 10m cables with connector and shade disk.**

LP SILICON-PYRA 04 Pyranometer with silicon photodiode for measuring the global solar irradiance, diffuser for cosine correction. Spectral range 350...1100 nm. Typical sensitivity: 10 µV/W m⁻². Measuring range: 0...2000 W/m². Fixed cable 5m long, terminated with open wires.

HD9217TF1 SOLAR RADIATIONS SHIELD OPTIONS

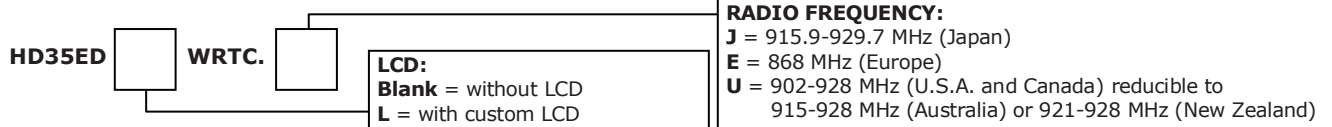


A

B

A = for fixing to a Ø 40 mm mast (with HD2003.77/40 clamping)
B = wall mount (without clamping)

DATA LOGGER ORDERING CODES



HD35EDW1NRTC – HD35EDLW1NRTC

Waterproof temperature, humidity and solar radiation wireless data logger



Temperature, humidity and solar radiation wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (24,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Two inputs with M12 connector: one for the **HP3517TC2** (AISI 304) temperature and relative humidity combined probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**, and one for the pyranometer **LP PYRA 03**.

Calculated quantities: dew point, wet bulb temperature, absolute humidity, daily solar radiation in Wh/m² (Wh = watt hour).

The pyranometer mV signal is also displayed.

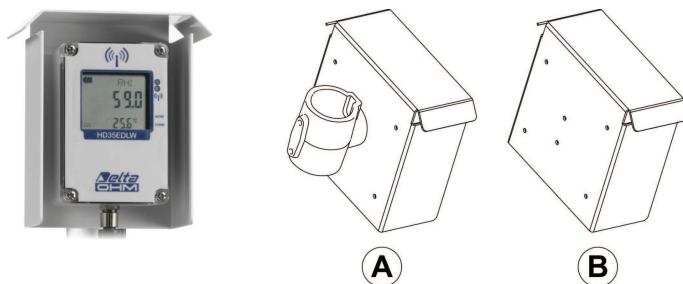
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Solar radiation	
Sensor	Thermopile
Measuring range	0...2000 W/m ²
Resolution	1 W/m ²
Sensitivity	Configurable in mV/(kW m ⁻²)

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

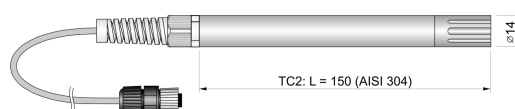
HD9217TF1 SOLAR RADIATIONS SHIELD OPTIONS



A = for fixing to a \varnothing 40 mm mast (with HD2003.77/40 clamping)
B = wall mount (without clamping)

PROBES

HP3517TC2: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10K Ω @ 25 °C temperature sensor. In AISI 304. Stem length 145 mm. 4-pole M12 connector.



HP3517TC2. **CABLE LENGTH:**
2 = 2 m, **5** = 5 m, **10** = 10 m

LP PYRA 03: second Class pyranometer according to ISO 9060. Output in μ V/(Wm⁻²). Supplied with levelling device, connector and Calibration Report. **On request 5 or 10m cables with connector and shade disk.**

DATA LOGGER ORDERING CODES

HD35ED	<input type="checkbox"/>	W1NRTC.	<input type="checkbox"/>	LCD: Blank = without LCD L = with custom LCD	RADIO FREQUENCY: J = 915.9-929.7 MHz (Japan) E = 868 MHz (Europe) U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)
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HD35EDW7PRTC – HD35EDLW7PRTC

Waterproof solar radiation and solar panel temperature wireless data logger



Solar radiation and solar panel temperature wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (36,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Three inputs with M12 connector: one for the **TP35878ISS...** Pt100 temperature probe for solar panel and one for the pyranometer.

Calculated quantities: daily solar radiation in Wh/m² (Wh = watt hour).

The pyranometer mV signal is also displayed.

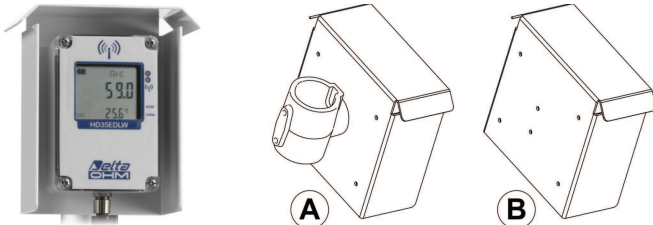
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a Ø 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Solar radiation	
Sensor	Thermopile
Measuring range	0...2000 W/m ²
Resolution	1 W/m ²
Sensitivity	Configurable in mV/(kW m ⁻²)
Solar panel temperature	
Sensor	Pt100 1/3 DIN
Measuring range	0...+85 °C
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

HD9217TF1 SOLAR RADIATIONS SHIELD OPTIONS



A = for fixing to a Ø 40 mm mast (with HD2003.77/40 clamping)
B = wall mount (without clamping)

PROBES

LP PYRA 03: second Class pyranometer according to ISO 9060. Output in µV/(Wm⁻²). Supplied with levelling device, connector and Calibration Report. **On request 5 or 10m cables with connector and shade disk.**

TP35878ISS.5: Contact temperature probe for solar panel. 1/3 DIN Pt100 sensor. Temperature working range 0...+85 °C. 5 m cable. 4-pole M12 connector.

TP35878ISS.10: Contact temperature probe for solar panel. 1/3 DIN Pt100 sensor. Temperature working range 0...+85 °C. 10 m cable. 4-pole M12 connector.



DATA LOGGER ORDERING CODES

HD35ED	<input type="checkbox"/>	W7PRTC.	<input type="checkbox"/>	LCD: Blank = without LCD L = with custom LCD	RADIO FREQUENCY: J = 915.9-929.7 MHz (Japan) E = 868 MHz (Europe) U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)
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HD35EDW1N7PRTC – HD35EDLW1N7PRTC

Waterproof temperature, humidity, solar radiation and solar panel temperature wireless data logger



Environmental temperature, humidity, solar radiation and solar panel temperature wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Three inputs with M12 connector: one for the **HP3517TC2** (AISI 304) temperature and relative humidity combined probe with **NTC10KΩ** temperature sensor and **high accuracy R.H. sensor**, one for the pyranometer and one for the **TP35878ISS...** Pt100 temperature probe for solar panel.

Calculated quantities: dew point, absolute humidity, daily solar radiation in Wh/m² (Wh = watt hour). The pyranometer mV signal is also displayed.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a Ø 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

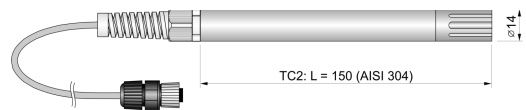
TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	±2% over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 kΩ @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Solar radiation	
Sensor	Thermopile
Measuring range	0...2000 W/m ²
Resolution	1 W/m ²
Sensitivity	Configurable in mV/(kW m ⁻²)
Solar panel temperature	
Sensor	Pt100 1/3 DIN
Measuring range	0...+85 °C
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

PROBES

HP3517TC2: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10KΩ @ 25 °C temperature sensor. In AISI 304. Stem length 145 mm. 4-pole M12 connector.

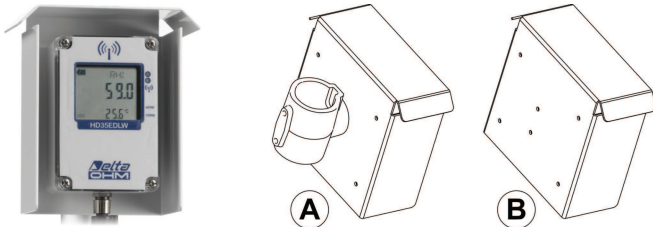


HP3517TC2. **CABLE LENGTH:** 2 = 2 m, 5 = 5 m, 10 = 10 m

LP PYRA 03: second Class pyranometer according to ISO 9060. Output in μV/(Wm⁻²). Supplied with levelling device, connector and Calibration Report. **On request 5 or 10m cables with connector and shade disk.**

TP35878ISS...: Contact temperature probe for solar panel. 1/3 DIN Pt100 sensor. Temperature working range 0...+85 °C. 5 m or 10 m cable. 4-pole M12 connector.

HD9217TF1 SOLAR RADIATIONS SHIELD OPTIONS



A = for fixing to a Ø 40 mm mast (with HD2003.77/40 clamping)
B = wall mount (without clamping)

DATA LOGGER ORDERING CODES

HD35ED	W1N7PRTC.	LCD: Blank = without LCD L = with custom LCD	RADIO FREQUENCY: J = 915.9-929.7 MHz (Japan) E = 868 MHz (Europe) U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)
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HD35EDWRPTC – HD35EDLWRPTC

Waterproof solar radiation and rainfall quantity wireless data logger



Solar radiation and rainfall quantity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory and transmits the logged data to the base unit automatically at regular intervals or upon request.

Two inputs with M12 connector for the pyranometer and the rain gauge.

Calculated quantities: daily solar radiation in Wh/m² (Wh = watt hour), rainfall rate in mm/h, daily rainfall in mm.

The pyranometer mV signal is also displayed.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a Ø 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Solar radiation	
Sensor	Thermopile
Measuring range	0...2000 W/m ²
Resolution	1 W/m ²
Sensitivity	Configurable in mV/(kW m ⁻²)
<i>Note: for the other characteristics, please refer to the data sheet of the chosen pyranometer.</i>	
Rainfall quantity	
Sensor	Tipping bucket with NC or NO configurable contact
Resolution	Configurable 0.1 – 0.2 – 0.5 mm/tipping
<i>Note: for the other characteristics, please refer to the data sheet of the chosen rain gauge.</i>	
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionyl chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

PYRANOMETERS

LP PYRA 02 First Class pyranometer according to ISO 9060. Output in µV/(Wm⁻²). Supplied with: shade disk, cartridge with silica-gel crystals, 2 spare sachets, levelling device, connector and Calibration Report. **On request 5 or 10m cables with connector.**

LP PYRA 03 Second Class pyranometer according to ISO 9060. Output in µV/(Wm⁻²). Supplied with levelling device, connector and Calibration Report. **On request 5 or 10m cables with connector and shade disk.**

LP SILICON-PYRA 04 Pyranometer with silicon photodiode for measuring the global solar irradiance, diffuser for cosine correction. Spectral range 350...1100 nm. Typical sensitivity: 10 µV/W m⁻². Measuring range: 0... 2000 W/m². Fixed cable 5m long, terminated with open wires.

RAIN GAUGES

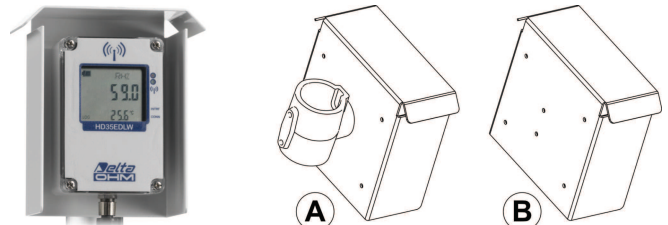
HD2013 Tipping bucket rain gauge, 400cm² area, for temperature ranging from 4 °C to +60 °C. Standard resolution 0.2 mm. 0.1 or 0.5 mm on request with order. Normally closed output contact.

HD2013R Tipping bucket rain gauge, 400cm² area, with heater for temperature ranging from -20 to +60 °C. Standard resolution 0.2 mm. 0.1 or 0.5 mm on request with order. Normally closed output contact. Power supply: 12 Vdc or 24 Vdc ± 10% / absorbed power 165 W.

HD2015 Tipping bucket rain gauge, 200cm² area, for temperature ranging from 4 °C to +60 °C. Standard resolution 0.2 mm. 0.1 or 0.5 mm on request with order. Normally closed output contact.

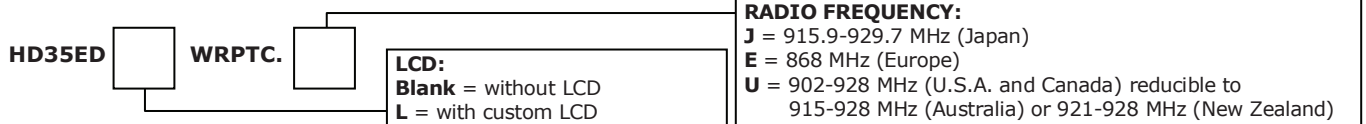
HD2015R Tipping bucket rain gauge, 200cm² area, with heater for temperature ranging from -20 to +60 °C. Standard resolution 0.2 mm. 0.1 or 0.5 mm on request with order. Normally closed output contact. Power supply: 12 Vdc or 24 Vdc ± 10% / absorbed power 50 W.

HD9217TF1 SOLAR RADIATIONS SHIELD OPTIONS



A = for fixing to a Ø 40 mm mast (with HD2003.77/40 clamping)
B = wall mount (without clamping)

DATA LOGGER ORDERING CODES



HD35EDWPTC – HD35EDLWPTC

Waterproof rainfall quantity wireless data logger



Rainfall quantity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (36,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the rain gauge.

Calculated quantities: rainfall rate in mm/h, daily rainfall in mm.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Rainfall quantity	
Sensor	Tipping bucket with NC or NO configurable contact
Resolution	Configurable 0.1 – 0.2 – 0.5 mm/tipping
<i>Note:</i> for the other characteristics, please refer to the data sheet of the chosen rain gauge.	
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

RAIN GAUGES

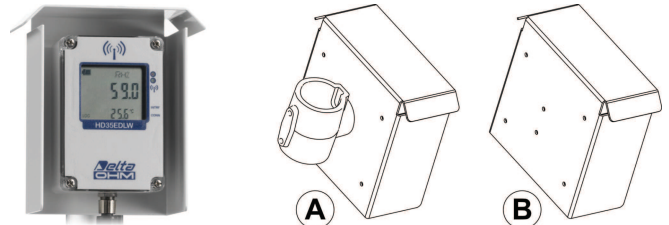
HD2013 Tipping bucket rain gauge, 400cm² area, for temperature ranging from 4 °C to +60 °C. Standard resolution 0.2 mm. 0.1 or 0.5 mm on request with order. Normally closed output contact.

HD2013R Tipping bucket rain gauge, 400cm² area, with heater for temperature ranging from -20 to +60 °C. Standard resolution 0.2 mm. 0.1 or 0.5 mm on request with order. Normally closed output contact. Power supply: 12 Vdc or 24 Vdc \pm 10% / absorbed power 165 W.

HD2015 Tipping bucket rain gauge, 200cm² area, for temperature ranging from 4 °C to +60 °C. Standard resolution 0.2 mm. 0.1 or 0.5 mm on request with order. Normally closed output contact.

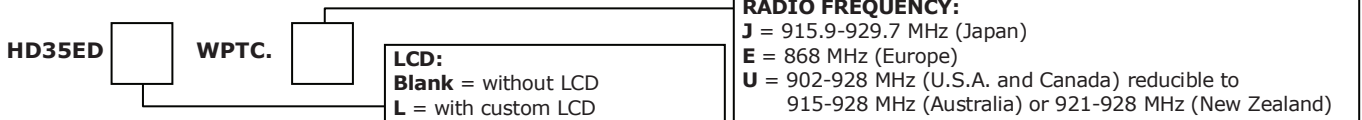
HD2015R Tipping bucket rain gauge, 200cm² area, with heater for temperature ranging from -20 to +60 °C. Standard resolution 0.2 mm. 0.1 or 0.5 mm on request with order. Normally closed output contact. Power supply: 12 Vdc or 24 Vdc \pm 10% / absorbed power 50 W.

HD9217TF1 SOLAR RADIATIONS SHIELD OPTIONS



A = for fixing to a \varnothing 40 mm mast (with HD2003.77/40 clamping)
B = wall mount (without clamping)

DATA LOGGER ORDERING CODES



HD35EDW1NLTC – HD35EDLW1NLTC

Waterproof temperature, humidity and leaf wetness wireless data logger



Temperature and humidity and leaf wetness wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (22,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Two inputs with M12 connector: one for the **HP3517TC2** (AISI 304) temperature and relative humidity combined probe with **NTC10K Ω** temperature sensor and **high accuracy R.H. sensor**, and one for the leaf wetness sensor **HP3501...**

Calculated quantities: dew point, wet bulb temperature, absolute humidity, mixing ratio, partial vapour pressure.

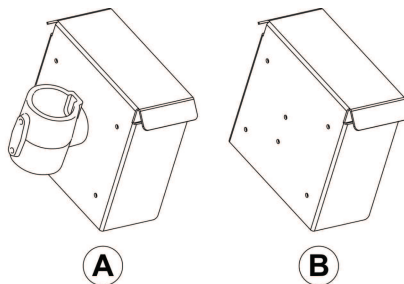
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	$\pm 2\%$ over the whole operating temperature range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 k Ω @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C in the range 0...+70 °C ± 0.4 °C outside
Long-term stability	0.1 °C / year
Leaf wetness	
Sensor	Capacitive
Measuring range	0...100% of leaf area wetness
Resolution	0.1%
Accuracy (@ 23 °C)	± 5 %
Sensor operating temperature	-30...+60 °C

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

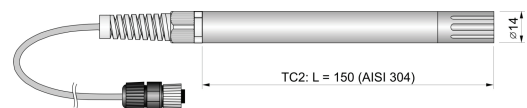
HD9217TF1 SOLAR RADIATIONS SHIELD OPTIONS



A = for fixing to a \varnothing 40 mm mast (with HD2003.77/40 clamping)
B = wall mount (without clamping)

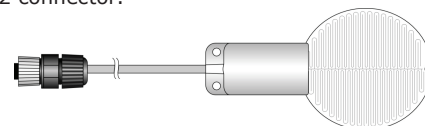
PROBES

HP3517TC2: temperature and relative humidity combined probe with high accuracy R.H. sensor and NTC10K Ω @ 25 °C temperature sensor. In AISI 304. Stem length 150 mm. 4-pole M12 connector.



HP3517TC2. **CABLE LENGTH:**
2 = 2 m, 5 = 5 m, 10 = 10 m

HP3501: Leaf wetness sensor with double sensitive surface. 4-pole M12 connector.



HP3501. **CABLE LENGTH:**
5 = 5 m, 10 = 10 m

DATA LOGGER ORDERING CODES

HD35ED	<input type="checkbox"/>	W1NLTC.	<input type="checkbox"/>	LCD: Blank = without LCD L = with custom LCD	RADIO FREQUENCY: J = 915.9-929.7 MHz (Japan) E = 868 MHz (Europe) U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)
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HD35EDWSTC – HD35EDLWSTC

Waterproof soil temperature and humidity wireless data logger



Soil temperature and humidity wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (52,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

One input with M12 connector for the **HP3510.1** or **HP3510.2** soil temperature and humidity combined probe.

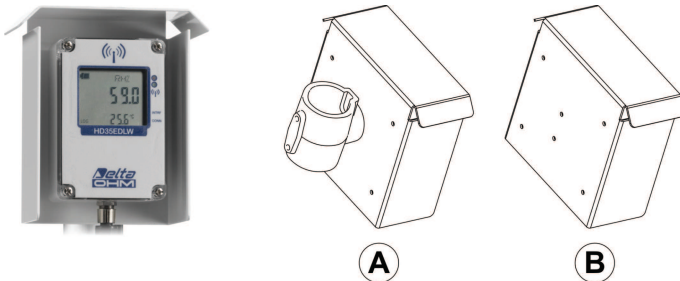
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Measuring principle	Capacitive
Measuring range	0...100% VWC (Volumetric Water Content)
Resolution	0.1%
Accuracy (@ 23 °C)	$\pm 3\%$ between 0 and $0.57 \text{ m}^3/\text{m}^3$ (standard mineral soil up to 5 mS/cm)
Sensor operating temperature	$-40...+60$ °C
Temperature	
Sensor	NTC $10 \text{ k}\Omega$ @ 25 °C
Measuring range	$-40...+60$ °C
Resolution	0.1 °C
Accuracy	± 0.5 °C
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	$-20...+70$ °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probe and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

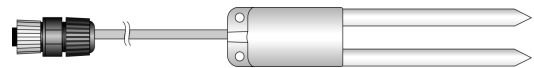
HD9217TF1 SOLAR RADIATIONS SHIELD OPTIONS



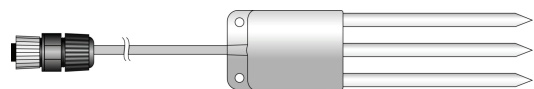
A = for fixing to a \varnothing 40 mm mast (with HD2003.77/40 clamping)
B = wall mount (without clamping)

PROBES

HP3510.1: 2-electrode probe for measuring the soil humidity. With integrated NTC $10 \text{ k}\Omega$ temperature sensor. 4-pole M12 connector. 5 m cable.



HP3510.2: 3-electrode probe for measuring the soil humidity in restricted volumes. With integrated NTC $10 \text{ k}\Omega$ temperature sensor. 4-pole M12 connector. 5 m cable.

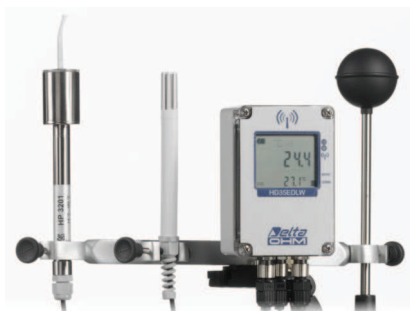


DATA LOGGER ORDERING CODES



HD35EDWWBGT – HD35EDLWWBGT

Waterproof wireless data logger for the analysis of the WBGT index



Wireless data logger for the analysis of the **WBGT** (Wet Bulb Globe Temperature) index. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (30,000 samples) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Three inputs with M12 connector for the wet bulb temperature probe, the globe-thermometer temperature probe and the dry bulb temperature probe.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation on VTRAP30 tripod (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Wet bulb temperature	
Sensor	Pt100
Measuring range	+4...+80 °C
Resolution	0.1 °C
Accuracy	Class A
Long-term stability	0.1 °C / year
Globe-thermometer temperature	
Sensor	Pt100
Measuring range	-10...+100 °C
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year
Dry bulb temperature	
Sensor	Thin film Pt100
Measuring range	-40...+100 °C
Resolution	0.1 °C
Accuracy	1/3 DIN
Long-term stability	0.1 °C / year

Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, AA format, 2-pole Molex 5264 connector
Battery life	2 years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	129 x 80 x 55 mm (excluding probes and external antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

PROBES

TP3501TC2: natural ventilation wet bulb probe. Pt100 sensor. Probe stem probe: Ø 14 mm, length 110 mm. Complete with two spare cotton wicks and 50 cc distilled water container.

TP3575TC2: Pt100 sensor globe-thermometer temperature probe, globe Ø 150 mm. Stem: Ø 14 mm, length 110 mm.

TP3576TC2: Pt100 sensor globe-thermometer temperature probe, globe Ø 50 mm. Stem: Ø 8 mm, length 170 mm.

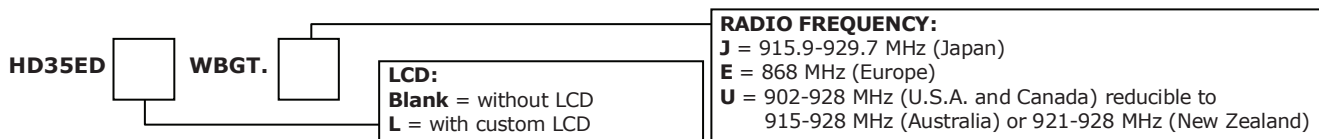
TP3507TC2: temperature probe. Pt100 1/3 DIN sensor. Probe stem: Ø 14 mm, length 140 mm.

HD32.2.7: holder for 4 probes, to be fixed on the tripod.

VTRAP30: tripod, maximum height 280 mm.

HD35.24W: flange for fixing the data logger.

DATA LOGGER ORDERING CODES



HD35EDWH – HD35EDLWH

Waterproof wireless data logger with four terminal header inputs for standard sensors



Wireless data logger with four terminal header inputs for the connection of transmitters with 4÷20 mA, 0÷1/0÷10 V or 0÷50 mV output, Pt100/Pt1000 sensors, K, J, T, N, E thermocouples, sensors with voltage free contact output (max. one sensor) and potentiometric sensors.

IP 67 waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (from 28,000 to 58,000 samples depending on the number and type of connected sensors) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery or external 7...28 Vdc power supply (**option E**). Installation: wall mounting with HD35.24W flange (**optional**) or fixing to a \varnothing 40 mm mast with HD2003.77/40 clamping (**optional**). Protection shield against solar radiations HD9217TF1 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Pt100/Pt1000	
Measuring range	-200...+650 °C
Resolution	0.1 °C
Accuracy	± 0.1 °C (excluding probe error)
Sensor coefficient	$\alpha=0.00385 \text{ } ^\circ\text{C}^{-1}$
Connection	2, 3 or 4 wires
Thermocouple	
Thermocouple type	K, J, T, N, E (inputs not isolated, use thermocouples with isolated hot junction)
Measuring range	K: -200...+1370 °C J: -100...+750 °C E: -200...+750 °C T: -200...+400 °C N: -200...+1300 °C
Resolution	0.1 °C
Accuracy (excluding probe error)	K: ± 0.1°C (< 600°C) E: ± 0.1°C (< 300°C) ± 0.2°C (> 600°C) ± 0.2°C (> 300°C) N: ± 0.1°C (< 600°C) J: ± 0.1°C ± 0.2°C (> 600°C) T: ± 0.1°C
Input 0/4...20mA	
Shunt resistance	Internal (50 Ω)
Resolution	16 bit
Accuracy	± 2 μ A
Voltage Input	
Input resistance	100 M Ω
Resolution	16 bit
Accuracy	± 0.01% f.s.
Voltage-free contact	
Switching frequency	50 Hz max.
Hold Time	10 ms min.
Potentiometer	
Value	Typical 10 k Ω
Resolution	16 bit
Accuracy	± 0.01% f.s.
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (reduced if any obstacles or adverse atmospheric conditions)
Logging interval	1,2,5,10,15,30 s / 1,2,5,10,15,30,60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, C format, 2-pole Molex 5264 connector 7...28 Vdc version (without battery) available
Battery life	4years typ. (without repeaters, measurement interval 10 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	140 x 80 x 55 mm (excluding ext. antenna)
Weight	250 g approx.
Housing	Polycarbonate
Protection degree	IP 67

PROBES

TP35.1...: stainless steel temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: -50...+105 °C. Dimensions: \varnothing 6 x 50 mm. Cable ending with free wires.



TP35.1. **3** = cable 3m, **5** = cable 5m, **10** = cable 10m

TP35.2...: thermoplastic rubber temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: 0...+70 °C. Dimensions: \varnothing 5 x 20 mm. Cable ending with free wires.



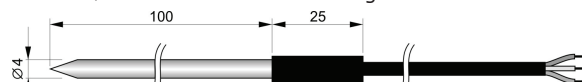
TP35.2. **3** = cable 3m, **5** = cable 5m

TP35.4...: stainless steel temperature probe. 4-wire 1/3 DIN Pt100 sensor. Operating temperature: -50...+105 °C. Dimensions: \varnothing 6 x 50 mm. Cable ending with free wires.



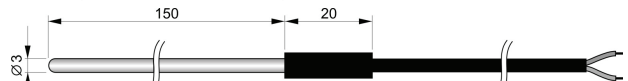
TP35.4. **3** = cable 3m, **5** = cable 5m, **10** = cable

TP35.5...: stainless steel penetration temperature probe. 3-wire 1/3 DIN Pt1000 sensor. Operating temperature: -40...+300 °C. Dimensions: \varnothing 4 x 100 mm. Cable ending with free wires.

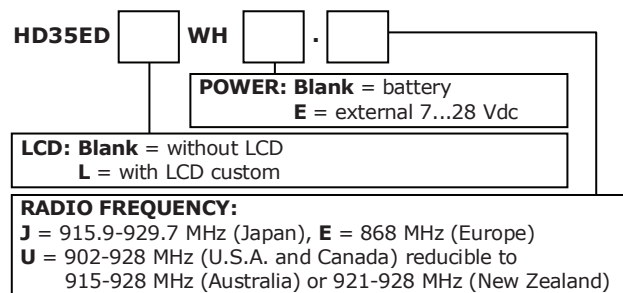


TP35.5. **3** = cable 3m, **5** = cable 5m

TP35K6.5: stainless steel temperature probe. K-type thermocouple sensor with isolated junction. Operating temperature: -50...+750 °C. Cable length 5 m. Cable ending with free wires.

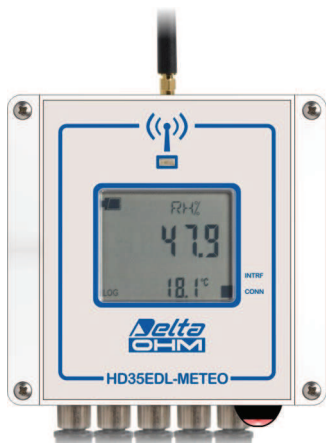


DATA LOGGER ORDERING CODES



HD35EDM...TC – HD35EDLM...TC

Waterproof wireless data logger for weather station



Temperature, humidity, atmospheric pressure, solar radiation, rainfall quantity, wind speed and direction wireless data logger. **IP 67** waterproof housing. Custom LCD display (only with **option L**). It stores the measures in its internal memory (from 28,000 to 58,000 samples depending on the number of inputs used) and transmits the logged data to the base unit automatically at regular intervals or upon request.

Five inputs with M12 connector: for the **HP3517TC...** temperature and relative humidity combined probe, for the pyranometer, for the rain gauge, for the **HP54.3** cup anemometer and for the **HP54.D** wind vane. **Versions with only some of the inputs can be ordered.**

Calculated quantities: dew point, daily solar radiation in Wh/m² (Wh = watt hour), rainfall rate in mm/h, Wind Chill, Wind Gust, dominant wind direction.

Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software. Powered by the internal battery. Installation: wall mount or fixing to a 40 mm diameter mast through the clamping HD2003.77/40 (**optional**). Protection shield against solar radiations HD32MT4.6 (**optional**) for outdoor installation. External antenna for outdoor installation with protection shield against solar radiations. Internal antenna for indoor installation.

TECHNICAL CHARACTERISTICS

Humidity	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 1.5 %RH (0..90 %RH) ± 2 %RH (remaining range)
Sensor operating temperature	-20...+80 °C
Temperature drift	±2% over the whole operating temp. range
Long-term stability	1% / year
Temperature	
Sensor	NTC 10 kΩ @ 25 °C
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.3 °C (0...+70 °C) / ± 0.4 °C (outside)
Long-term stability	0.1 °C / year
Atm. pressure	
Sensor	Piezo-resistive
Measuring range	300...1100 hPa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa (800...1100 hPa) @ T=25°C ± 1 hPa (300...1100 hPa) @ T=0...50°C
Long-term stability	1 hPa / year
Solar radiation	
Sensor	Thermopile
Measuring range	0...2000 W/m ²
Resolution	1 W/m ²
Sensitivity	Configurable in mV/(kW m ⁻²)
Rainfall quantity	
Sensor	Tipping bucket with NC or NO configurable contact
Resolution	Configurable 0.1 – 0.2 – 0.5 mm/tipping

Wind speed (HD54.3)	
Sensor	3-cup anemometer
Measuring range	1...65 m/s
Resolution	0.1 m/s
Accuracy	± 0.14 m/s @ 10 m/s installed on a flat terrain site
Offset	0.35 m/s
Gain	0.765 m s ⁻¹ /Hz
Distance constant (63% recovery)	2.55 m @ 5 m/s / 2.56 m @ 10 m/s (ASTM D 5096-02)
Wind direction (HD54.D)	
Sensor	continuous rotation potentiometric vane
Measuring range	0...359.9°
Resolution	0.1°
Accuracy	< 1%
Dead band	4° typical, 8° max.
Threshold	1 m/s
Instrument	
Transmission frequency	Factory configurable at choice among: 868 MHz, 902-928 MHz, 915-928 MHz, 921-928 MHz or 915,9-929,7 MHz depending on the frequency in use in the country of installation
Transmission range	In open field: 300 m (E, J)/ 180 m (U) with internal antenna. > 500 m (E, J, U) with external antenna. (can be reduced in presence of obstacles or adverse atmospheric conditions)
Logging interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Power supply	Non rechargeable lithium thionil chloride (Li-SOCl ₂) internal battery, 3.6 V, C format, capacity 8400 mAh
Battery life	4 years typical (without repeaters, measurement interval 5 s and log interval 30 s)
Operating conditions	-20...+70 °C / 0...100 %RH non condensing
Dimensions	122 x 120 x 56 mm (excluding probes and external antenna)
Weight	600 g approx. (including fixing clamp)
Housing	Polycarbonate
Protection degree	IP 67

DATA LOGGER ORDERING CODES



RADIO FREQUENCY:
J = 915.9-929.7 MHz (Japan)
E = 868 MHz (Europe)
U = 902-928 MHz (U.S.A. and Canada) reducible to 915-928 MHz (Australia) or 921-928 MHz (New Zealand)