HD35ED1NB – HD35EDG1NB
Temperature, humidity and carbon dioxide (CO$_2$) 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 thyonil 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 ☐ 1NB. ☐

LCD:
Blank = without LCD
G = with graphic 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)

HD35ED1NAB – HD35EDG1NAB
Temperature, humidity, carbon monoxide (CO) and
carbon dioxide (CO_2) 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 thyonil 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 ☐ 1NAB. ☐

LCD:
Blank = without LCD
G = with graphic 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)

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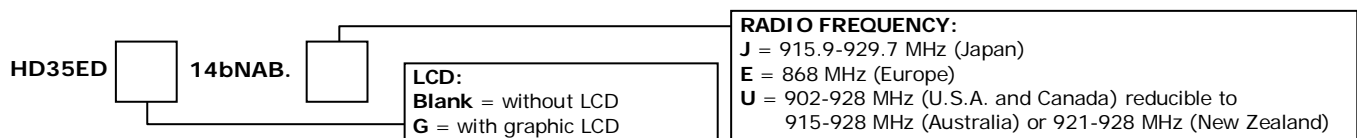
Acoustic alarm with internal buzzer. Configuration via **HD35AP-S** software or front keyboard (only version with LCD). Powered by the internal battery. Wall mount removable (by using the included support) or fixed (with optional flanges) installation.

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 (CO₂)	
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 thyonil chloride (Li-SOCl₂) 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 ☐ 14bNAB. ☐

LCD:
Blank = without LCD
G = with graphic 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)