

Product information

Wireless data loggers GHM DeltaBus

**Wireless data logger
 HD35EDM...TC
 HD35EDLM...TC**



- **Waterproof wireless data logger for weather station**

Characteristics

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 sensor, 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 data

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

Product information

Wireless data loggers GHM DeltaBus

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-SOCl₂) 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 sensors and external
 antenna)

Weight : 600 g approx. (including fixing clamp)

Housing : Polycarbonate

Protection degree : IP 67

Ordering codes

HD35ED - 1. MTC. 2.

1.	LCD	
	0	without LCD
	L	with custom LCD
2.	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)