

# LR35[G]1NB[2]V

## Temperature, humidity, CO<sub>2</sub> and VOC index LoRaWAN® data logger



Temperature, humidity, CO<sub>2</sub> and VOC index LoRaWAN® data logger. Min. 44,000 / Max. 120,000 samples. Optional graphic LCD display (**option G**). Mini-USB port on the side for external power supply.

The sensors are all inside the housing.

Two CO<sub>2</sub> ranges available: 5,000 ppm (**LR35[G]1NBV**) or 10,000 ppm (**LR35[G]1NB2V**).

**Calculated quantities:** dew point, wet bulb temperature, absolute humidity.

The barometric pressure used for CO<sub>2</sub> measurement compensation is provided.

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

### TECHNICAL CHARACTERISTICS

<b>Humidity</b>	
Sensor	Capacitive
Measuring range	0...100% RH
Resolution	0.1% RH
Accuracy (@ 23 °C)	± 2.5 %RH (0..85 %RH) ± 3.5 %RH (85...100 %RH)
Temperature drift	0.05 %RH/K (0...60 °C)
Long-term stability	< 1%/year (@ 23 °C and 30...70 %RH)
<b>Temperature</b>	
Sensor	Sensor integrated in humidity module
Measuring range	-40...+105 °C
Resolution	0.1 °C
Accuracy	± 0.2 °C @ T=0...60 °C ± (0.2 - 0.05 * T) °C @ T<0 °C ± [0.2 + 0.032 * (T-60)] @ T > 60 °C
Long-term stability	0.05 °C/year
<b>CO<sub>2</sub></b>	
Sensor	Non-dispersive infrared rays (NDIR)
Measuring range	0...5,000 or 10,000 ppm depending on model
Resolution	1 ppm
Accuracy (@ T=25 °C & Patm=1013 hPa)	Range 0...5,000 ppm: ±(50 ppm+3% of measurement) Range 0...10,000 ppm: ±(100 ppm+5% of measurement)
Response time	T <sub>63</sub> < 140 s
Calibration interval	5 years (under normal operating conditions)
<b>VOC index</b>	
Sensor	Metal-Oxide film
Measuring range	1...500 (dimensionless index)
Resolution	1
Accuracy	relative qualitative measurement
Response time	T <sub>63</sub> < 10 s

<b>Barometric pressure</b>	
Sensor	Piezo-resistive
Measuring range	700...1100 hPa
Resolution	0.1 hPa
Accuracy	± 2 hPa @ T=25 °C & RH=20...80%
Temperature drift	± 0.015 hPa/°C
<b>Instrument</b>	
Frequency	EU868, US915, AU915, AS923, KR920 Other frequencies on request
RF range	> 1 km in open field
Measuring interval	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min
Logging & transmitting interval	2, 5, 10, 15, 30, 60 min
Power supply	External via USB with internal 3 x AA alkaline backup batteries
Operating conditions	-10...+50 °C / 0...85 %RH non condensing
Dimensions	135 x 126 x 33 mm
Weight	200 g approx.
Installation	Wall mount

### ORDERING CODES

