

# HD35ED[G]1NB[2]V

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



Temperature, humidity, CO<sub>2</sub> and VOC index wireless 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 (**HD35ED[G]1NBV**) or 10,000 ppm (**HD35ED[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)<br>± 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<br>± (0.2 - 0.05 * T) °C @ T<0 °C<br>± [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:<br>±(50 ppm+3% of measurement)<br>Range 0...10,000 ppm:<br>±(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>          |  |
| Transmission frequency     | Factory configurable at choice among:<br>868 MHz, 902-928 MHz, 915-928 MHz,<br>921.5-928 MHz or 915,9-929,7 MHz<br>depending on the frequency in use in the<br>country of installation |
| Transmission range         | 300 m (E, J)/ 180 m (U) in open field  |
| Measuring interval         | 1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 30, 60 min  |
| Logging interval           | 1, 2, 5, 10, 15, 30 s / 1, 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

