

HTemp-485 Box2

RS-485 humidity and temperature sensor

An RS-485 digital temperature and humidity sensor. The sensor has minimal power consumption and can be powered from a wide power supply range. It can be connected to Poseidon 1250 and 2251.

- Measured temperature and humidity are sent already in °C or % of humidity using a simple text protocol.
- You can connect up to 32 sensors over a 4-wire bus that contains a RS-485 line and a power source, up to the distance of 1000m.



HTemp-485 Box2 uses an integrated temperature element with $\pm 0,5^{\circ}\text{C}$ accuracy, Humidity is measured using a polymer sensor.

RS-485 protocol is compatible with Temp-485 sensor, measured values of temperature and humidity are read over RS-485 bus as two independent measurements, each with different address. So each H-Temp device has two different RS-485 communication addresses. Capital letter stands for temperature address, small letter for humidity address.

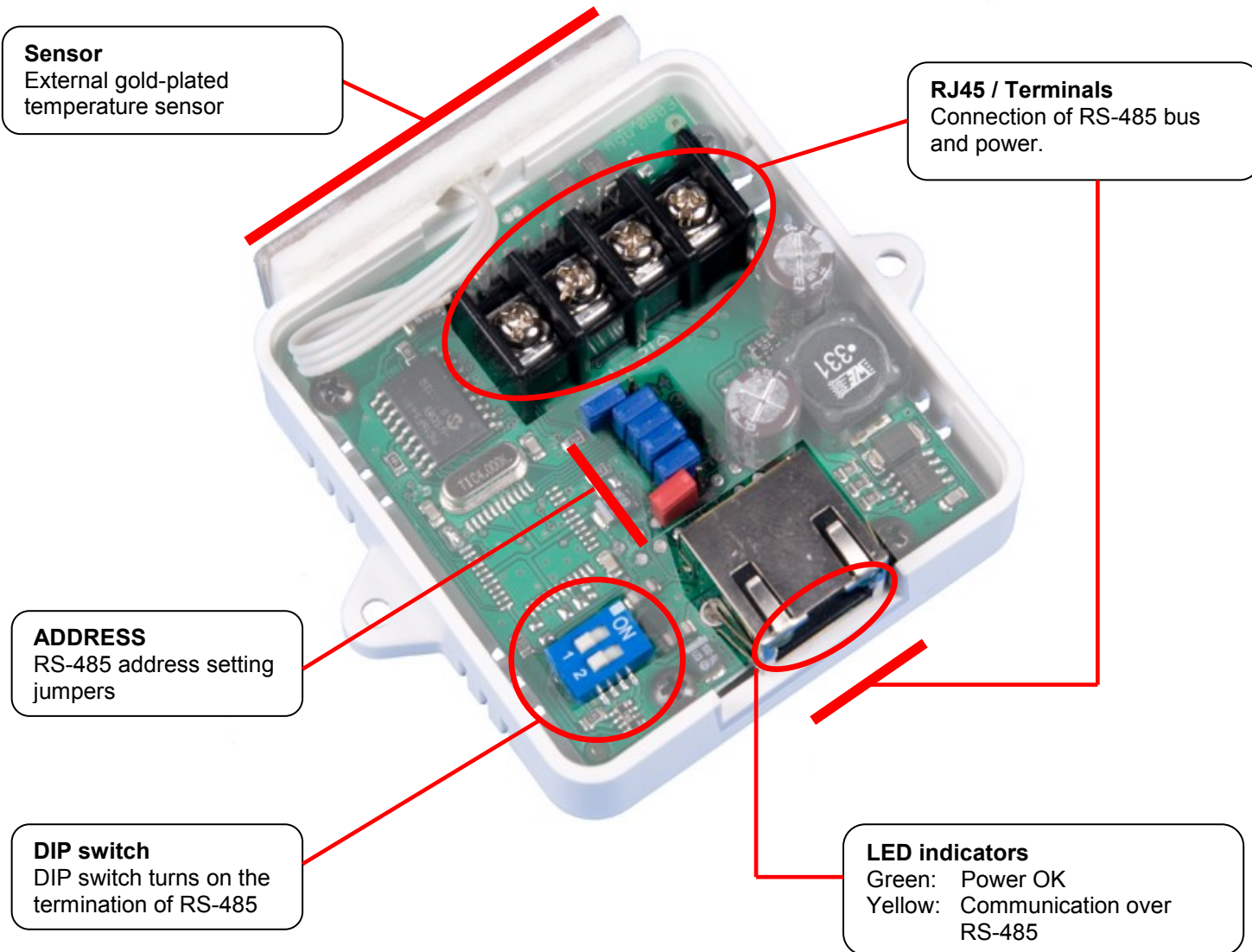
Applications

- Industry measurement and regulation – large temperature measuring systems
- Temperature measuring of storage, industrial or residential premises.
- When connected to a Poseidon device – measurements in technological premises and data transfer over Ethernet network

Basic features

- Relative humidity measurement from 0% to 100%
- Temperature measurement form -10°C up to $+85^{\circ}\text{C}$
- RS-485 communication
 - Compatible with Poseidon model 1250
 - Compatible with Poseidon model 2251
- LED indication of reading the values
- Minimum power consumption, no need for voltage regulation
- DIP switch selectable RS-485 termination
- Sensor address can be set:
 - Using jumpers
 - In terminal SETUP mode
- Easy wall mounting

Parameters



Sensor
External gold-plated temperature sensor

RJ45 / Terminals
Connection of RS-485 bus and power.

ADDRESS
RS-485 address setting jumpers

DIP switch
DIP switch turns on the termination of RS-485

LED indicators
Green: Power OK
Yellow: Communication over RS-485

Measured temperature range.....-10°C up to +70°C
Temperature measurement accuracy +/- 0,5 °C

Measured humidity range.....0% to 100%
Humidity measurement accuracy.....± 2% in range from 0% to 90% (15°C to 30°C)
Measuring element of humidity sensor Polymeric sensor

Setting RS-485 address..... Jumper or SETUP mode

Power voltage..... +8V to +30V DC, polarity reversing protection
RS-485 termination Optional (DIP1 and 2), always 10 kΩ for idle state of the line
Wire connection Terminal board / RJ45
Outer box dimensions: 80 x 64 x 67 mm (IP20)
Wall mounting: Mounting the sensor on the wall by two screws

| Ordering number | | |
|-----------------|----------------|---|
| 600 343 | HTemp-485 Box2 | Indoor temperature and humidity sensor with RJ45 and terminal for RS-485 connection |