

Description

This sensor is designed to measure the temperature and relative humidity in outdoor environments such as schools, hotels, commercial buildings, offices, greenhouses ...

Applications

- HVAC applications for building management
- Air conditioning
- Greenhouses monitoring process control
- Industrial automation applications



Technical Specifications

Humidity	
sensing principle	capacitive
Measuring Range	0 to 100% RH
Accuracy Typ.	± 3% (0% ≤ rH ≤ 80%)
resolution	0.4 %

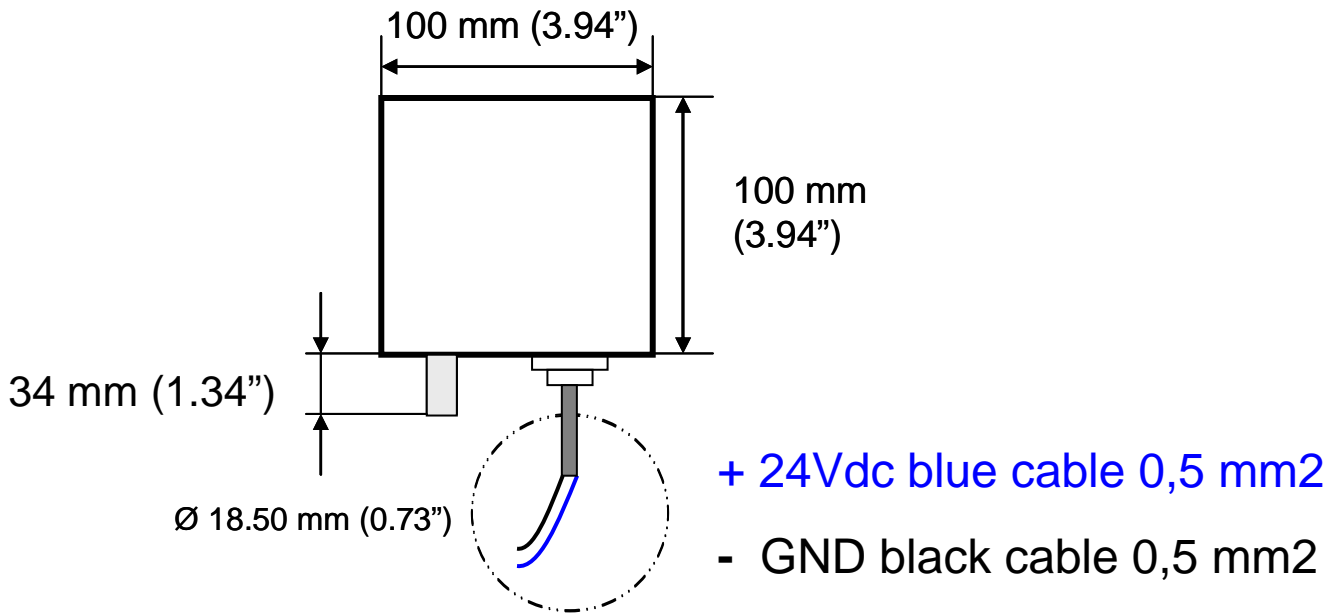
Temperature	
sensing principle	capacitive
Measuring Range	- 20°C to +60°C
Accuracy Typ.	± 0.3°C (- 10°C ≤ ta ≤ +85°C)
resolution	0.32°C

Output	
Wireless EnOcean (IEC 14543-3-10)	EnOcean EEP profile: (4BS) A5-04-02
MODBUS RTU - EIA-485 physical layer	Broadcast Unidirectional
Frequency	868 MHz
Humidity DATA	DATA BYTE 2 (scale 0...250) 0 bit -> 0 % 250 bit -> 100 %
Temperature DATA	DATA BYTE 1 (scale 0...250) 0 bit -> - 20°C 250 bit -> +60°C
Radio Regulations	R&TTE EN 300 220 (TCM 310)

Electrical Specifications	
Power supply	24 Vdc (7-28 Vdc) 230Vac optionally
Power consumption	10 mW
Operating Temperature	-20 ~ +60° C
Storage Temperature	-20 ~ + 80 °C
Operating Humidity	0 ~ 95% non-condensing
Electrical connection	2x cable 0.5 mm2

General Specifications	
Regulatory Compliance	CE Mark: EMC 2004/108/EC, RoHS 2011/65/EU, WEEE
	EN61000-6-2, EN61000-6-3
Casing Material	Fiberglass reinforced polycarbonate Filter: Polyethylene
IP Housing	IP66 -EN62208
IP Sensor Filter	IP55
Housing color	Grey RAL 7035
Dimensions box	100x100x60 mm (3.94x3.94x2.36")
Filter large	34 mm (1.34 ")
Weight	0.365 kg

Installation Diagram - Cabling - Dimensions



Commissioning Notes

If you desire to start the **learning process** to link with an EnOcean Receiver/gateway you should press the **S3-LRN button** on the PCB (see photo above).

Note: For hardware versions powered at 220Vac, on the every power connection/disconnection the sensor sends a learning telegram to be linked/paired to a receiver/gateway

Time-Interval

Measuring period: every 100 sec.

Transmission Measured Value:

- ⇒ Heartbeat: if not concentration changes, 5 min by default
- ⇒ Change of value over threshold: if there is $\pm 3\%$ rH or $\pm 1^\circ\text{C}$ variation always sending

Ordering Info Codes

Product Name	Reference
DPF-WOTH2 Temperature and Humidity 868MHz Outdoor sensor	EN271105
DPF-MOTH2 Outdoor Humidity and Temperature MODBUS sensor	EN273501



www.guemisa.com **SENSORES E INSTRUMENTACION GUEMISA S.L.**
C\ La Fundación 4 Bis - Pl 1ª Oficina-2
28522 Rivas Vaciamadrid (Madrid)
Telf. 91 764 21 00 email: ventas@guemisa.com

NIF: B-87969416