SENSOR INDUSTRIAL PRO

IQAROS Temperature and humidity sensor

Description

SENSOR INDUSTRIAL PRO is a temperature and relative humidity sensor intended for IQRF wireless 3D monitoring system IQAROS. It observes the IQRF Standard sensor specification.

Key features

- Indoor, with the sensor unit connected via a finger
- IQRF wireless Mesh connectivity
- Extra low power, battery operated. Battery lifetime 10 years typical.
- Beaming sensor supporting data collection by Aggregating repeaters

Purpose

- Temperature and humidity monitoring in indoor industrial environment

Applications

- IQRF wireless 3D temperature and humidity monitoring system IQAROS
- Monitoring of buildings, warehouses, laboratory conditions, etc.
- Smart house, Internet of Things

Technical specifications	*Typical* values (until otherwise specified)
Power supply	Battery AA 3.6 V, 2400 mAh, life time 10 years typical, 7 years guarrantied (if the conditions for operating are observed).
RF connectivity	IQRF wireless Mesh
RF band	868 MHz (916 MHz on request)
RF range	Tens of meters in buildings (depends on the environment and obstacles) Up to 400 m in free space
Temperature	Without hoar-frost and condensation
Range	0 °C to +45 °C (battery lifetime 7 years guarrantied) -20 °C to +70 °C (battery lifetime not guarrantied)
Resolution	0.0625 °C
Accuracy	Typical ± 0.2 °C (0 °C to +70 °C), from ± 0.25 °C to ± 0.2 °C (-20 °C to 0 °C) Maximal ± 0.4 °C (-20 °C to +70 °C)
Long-term drift	0.03 °C / year max.
Relative humidity	Without hoar-frost and condensation
Range	0 % to 90 % (battery lifetime 7 years guarrantied) 0 % to 100 % (battery lifetime not guarrantied)
Resolution	0.5 %
Accuracy	±2 %
Long term drift	0.25 % / year
Ingress protection	IP42
Main unit enclosure size	64 mm x 58 mm x 35 mm body, 94 mm x 88.4 mm x 35 mm total
Finger size	30.4 mm length, 15.0 mm diameter
Weight	115 g