Sensor Industrial X
IQAROS Temperature sensor

Description

IQD-SE03-03 (sensor Industrial X) is a temperature sensor intended for IQRF wireless 3D temperature monitoring system IQAROS. It observes the IQRF Standard sensor specification.

Key features

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

Purpose

- Temperature monitoring in an outdoor industrial environment

Applications

- IQRF wireless 3D temperature 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, lifetime 10 years typical, 7 years guaranteed (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
Beaming period	The sensor transmits the measured values every minute.
Temperature and humidity sensor IC	SHT3x series by Sensirion, factory calibrated
Temperature sensor (internal IC)	
Range	-40 °C to +85 °C.
Resolution	0.0625 °C
Accuracy	Typical ± 0.2 °C (0 °C to +85 °C), from ± 0.3 °C to ± 0.2 °C (-40 °C to 0 °C) Maximal ± 0.4 °C (-40 °C to +85 °C)
Long-term drift	0.03 °C / year max.
Ambient temperature	
Main unit	Without hoar-frost and condensation 0 °C to +45 °C (battery lifetime 7 years guaranteed) -20 °C to +70 °C (battery lifetime not guaranteed)
Sensor unit (on the cable)	-40 °C to +85 °C (fixed cable installation) -20 °C to +85 °C (flexible cable installation)
Ingress protection	IP67
Main unit	Enclosure size 64 mm x 58 mm x 35 mm body, 94 mm x 68.5 mm x 35 mm total
Sensor unit	Metallic case stainless steel DIN 1.4571, diameter 5.7 mm, length 50 mm. Total length 1.5 m.
Weight	175 g (including the sensor unit on the cable)