Sensor Industrial SX

IQAROS Temperature sensor

Description

IQD-SE03-07 (sensor Industrial SX) is a temperature sensor intended for IQRF wireless temperature monitoring system IQAROS Agro. It observes the IQRF Standard sensor specification.
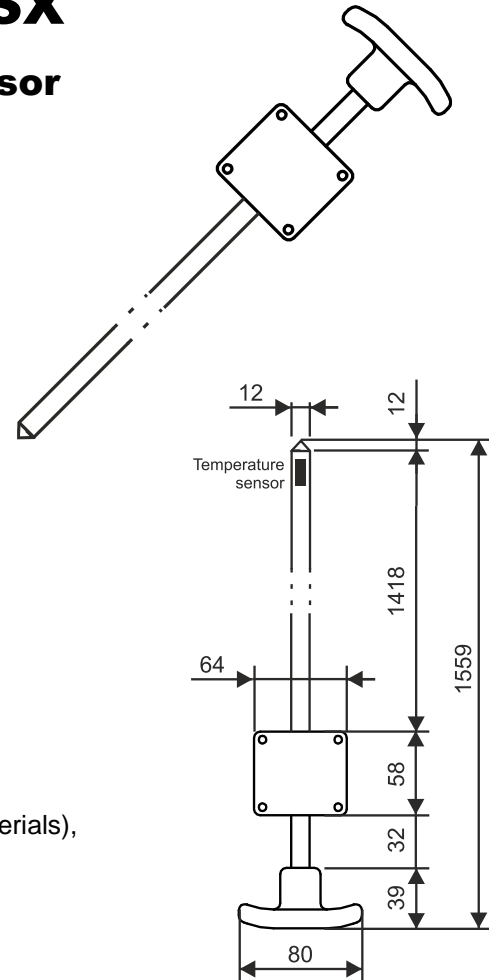
Key features

- Outdoor, with the sensor placed inside the stainless steel rod
- IQRF wireless Mesh connectivity
- Extra low power, battery-operated
- Beaming sensor supporting data collection by Aggregating repeaters

Purpose

- Temperature monitoring in bulk or liquid materials

Applications

- IQRF wireless temperature monitoring system IQAROS Agro
- Temperature monitoring inside of piles of grain, seeds, hay, straw (bedding materials), bulk fuels, bulk building materials, etc.
- Temperature monitoring in liquids, pools, ponds, breeding tanks, etc.
- Internet of Things

Technical specifications   ***Typical*** *values (until otherwise specified)*

Power supply	Battery AA 3.6 V, 2400 mAh, lifetime 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 (depending on the environment and obstacles), 100 m up to 400 m in free space, in both cases according to the height of the main unit above the ground.
Beaming period	The sensor transmits the measured values every minute.
Temperature sensor (internal IC)	
Range	-40 °C to +85 °C. Usage in IQD-SE03-07 is limited from -20 °C to +70 °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	0 °C to +45 °C (battery lifetime 7 years guaranteed)
	-20 °C to +70 °C (battery lifetime not guaranteed)
Sensor unit (metallic rod)	-20 °C to +70 °C
Ingress protection	IP67
Dimensions	Enclosure 64 mm x 58 mm x 35 mm, rod length 1.43 m, rod diameter 12 mm. Total length 1.56 m.
Weight	950 g