



DATASHEET

Q sensor

DESCRIPTION

Q sensor is an IoT device designed for volumetric measurement. Besides of the level detector, has been equipped with more sensors to provide information about the installation conditions. This device adjusts to unpredictable and dynamic scenarios due to its small dimensions, remote set up and real time alarms generation. It can be used in many applications such as waste, waste water and industry 4.0.

KEY FEATURES

- Temperature sensor integrated for fire detection
- GPS mount to provide device location (under request).
- Motion sensor to detect shaking, beating or unexpected movement.
- Remote set up: Max/Min Filling Level, volumetric sensor beam, dispatch time, dispatch frequency.
- Memory inside with capacity of 12 registers that can be extract in case of fault.
- High quality lithium battery cell with more than 10 years' lifetime.
- Enclosure rating with IP67 certification.
- Easy installation by rivets or self-tapping screws
- Equipped with different new and extended wireless technologies such as, 2G/GPRS, LoRa 868Mhz(EU) and Sigfox RC1, RC2 and RC4.



TECHNICAL FEATURES

Communications

Version	2G/ GPRS	LoRa EU	Sigfox RC1	Sigfox RC2	Sigfox RC4
Frequency band	900/ 1800 Mhz	868 Mhz	868 Mhz	902 Mhz	920 Mhz
Power (Tx)	33 dBm	14 dBm	14 dBm	22.5 dBm	22.5 dBm
Receiver sensitivity (Rx)		-137 dBm	-127 dBm	-129 dBm	-129 dBm
Antenna	External				

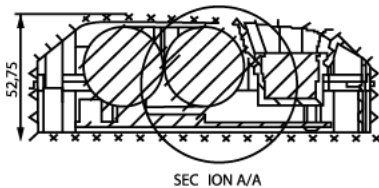
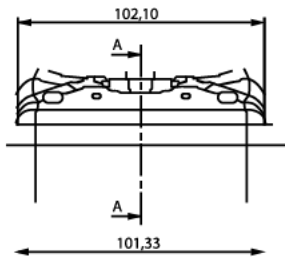
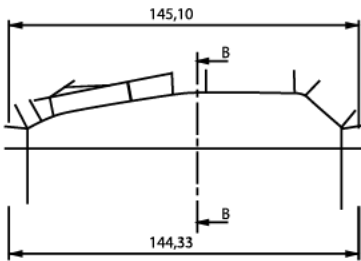
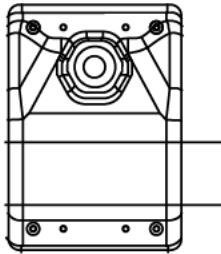
Sensor features

Sensor level	Ultrasonic sensor frequency: 40kHz Measurement ratio: 25cm - 500cm (accuracy: 2cm)
Motion sensor	Integrated
Acoustic indicator	Integrated
Temperature sensor	Integrated
GPS	GPS enabled (< 2.5 precisión CEP)
Alarms	Max Filling Level, low battery, location change, container shaking and fire detection.



ORDERING CODES

QT-0G-2G-WW Q sensor device, GPS, 2G/GPRS
QT-00-2G-WW Q sensor device, 2G/GPRS
QT-00-LW-EU Q sensor device, LoRaWAN EU868
QT-00-SX-R1 Q sensor device, Sigfox RC1-868
QT-00-SX-R2 Q sensor device, Sigfox RC2-902
QT-00-SX-R4 Q sensor device, Sigfox RC4-920



TECHNICAL FEATURES

Power supply & Memory

Battery features	Lithium 3.6V
Battery life	10 years* (This battery life is calculated for a fixed amount of seding per day)
Storage	Up to 12 records

Environmental and Operating conditions

Operating temperature range	-55°C to +85°C (-15°C to 75°C)
Protection class	IP67 certified
Lifetime	MTBF>90.000 h according to Telcordia SR-332

Mechanical features

Dimensions	HxWxD: 52.75mm x 102.10mm x 145.10mm
Weight	560 gr. (including battery)
Material	Polyamide

* Battery duration depends on the dialy sampling period