((SENSONEO))

Quatro Sensor

DATASHEET, 2020

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Overview

Sensoneo Quatro Sensor is an enterprise-class device monitoring fill-level of various types of containers. It uses four ultrasonic beams with measurements up to a depth of 400 cm.

Recommended for high-capacity bin types. May operate fully independently in all networks (LoRaWAN, SIGFOX, NBIoT, GSM / GPRS). Includes GPS module for position measurement and time synchronization and accelerometer for tilt recognition. Always inform you about the outside temperature and is configurable via Smart Waste Management System or in place via BLE - Sensoneo Configurator App. Powered by replaceable batteries which frequently inform the operator about their capacity.

Features

Type	Quatro Sensor
Production code	QS
Distance measurement	Yes. Four ultrasonic beams, 30° angle
Minimum distance	15 cm
Maximum distance	400 cm
Measurement calculation	Multi-measurement with weight approximation.
Temperature measurement	Yes. Accelerometer.
Weight batteries included	760 g

Weight batteries excluded	550 g
Size (h/w/d)	68 mm/ 200 mm/ 85 mm
Mounting options	Screws/ Clench/ Rails
Power supply	up to 7 years*
Batteries' voltage and capacity	3.7 V, 14.5 Ah, 10 mA to 2.0 V @ 20°C
Batteries type	Lithium-thionyl chloride – Li-SOCl2
Batteries replaceable	Yes. 1 battery for LoRaWAN, Sigfox, 2 batteries for NBIoT and GSM/GPRS type ER34615M (2 x 110 grams)
Temperature range	- 30°C to + 80°C
Networks supported	GSM/GPRS, LORA, SIGFOX, NBIoT/CATM1
NBIot / CATM1	FDD-LTE	B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/ B19/ B20/ B25**/ B26***/ B28
	TDD-LTE	B39 (for CATM1 only)
GPS	Yes.
Communication protocol	Message-based
Remote configuration	Yes. Via Smart Waste Management System and remotely via Sensoneo Configuration App.
Measurement times	Max. 24 times a day.
Bins supported	Larger types of bins.
Turn on mechanism	Battery placement.
Cover	Recyclable, polyamide with optical fibers.
Casing	IPG7
Humidity level	0 - 100

- Battery duration depends on local temperature, type, and position of the bin, master/slave role and frequency of measurement
** LTE B25 will be supported on BG96 with R1.2 hardware version
*** Under Development.