((SENSONEO))

Quatro sensor

Datasheet 2020



OVERVIEW

Sensoneo Quatro Sensor is an enterprise-class device monitoring fill-level of various types of containers. It uses four ultrasonic beams with measurement up to the 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.



T	O
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. Microcontroller thermostats.
Overturn measurement	YES. Accelerometer.
Weight batteries included	760 g
Weight battery excluded	550 g
Size (h/w/d)	68 mm/200 mm/85 mm
Mounting options	Screws/Clench/Rails
Power supply	up to 7 years ¹
Batteries voltage and capacity	3,7V, 14.5Ah, 10mA to 2.0V @ 20°C



Batteries type		Lithium-thionyl chloride – Li-SOCI2
Battery replaceable		YES, 1 battery for LoRaWAN, Sigfox, 2
		batteries for NBIoT and GSM/GPRS type
		ER34615M (2 x 110 grams)
Temperatures 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 ² / B26 ³ / B28
	TDD-LTE	B39 (for CATM1 only)
GPRS		850/900/1800/1900Mhz
Bluetooth Low Energy		YES. Configuration via Sensoneo
		Configurator App.
GPS		YES
Communication protocol		Message-based
Remote configuration		YES via Smart Waste Management System
		and remotely via Sensoneo Configurator App
Measurement times		Max 24 times a day
Bins supported		Larger types of bins
Turn on mechanism		Battery placement
Cover		Recyclable, polyamide with optical fibres
Casing		IP67
Humidity level		0 - 100
¹ battery duration depends on local temperature, type and position of the bin,		
master/slave role and frequency of measurement		

²LTE B25 will be supported on BG96 with R1.2 hardware version

³Under Development

Sensoneo enables a world that is green, clean and free of litter