LoRa™ Analogue Sensor

1. General features

LoRa™ analogue sensor is designed to operate with any gauge which outputs an analogue signal (0-10v) or (4-20mA).
The sensor integrates the following functions:

- A radio transceiver at 868MHz, long range, LoRa™ modulation, with an integrated antenna
- An input for an external power supply (9-15V/500mW)
- An analog input (0-10V)
- An analog input (4-20mA)
- A selector switch for the analog input
- A dedicated electronics to the power supply management of the gauge connected to the sensor
- A buzzer
- A switch for (ON) or (OFF)
- A lithium battery (Type A, 3.6Ah), life expectancy of 5 years for 24 measurements and one radio transmission per day
- Connectors for the external power supply and the gauge

LoRa™ analogue sensor is housed in a plastic package 85x82x54mm.

For water level measurement, LoRa™ analogue sensor can be used with First Sensor gauge type CTE/CTU/CTW 8000.

2. Technical specifications

Parameters	Min.	Typical	Max.	Unit	Comments
Radio transceiver					
Frequency		868		MHz	25°C
Tx power			14	dBm	25°C
Rx sensitivity			-128	dBm	25°C
Modulation		LoRa			
MAC layer		LoRaWAN			
Network layer		IPv6/6LowPan			
Application layer		"ZCL like"			
External power	9		15	V	Power=500mW at 25°C
Battery		3,6		V	Lithium battery (A; 3,6Ah)
Autonomy		5		Year	1 Transmit/day
Temperature					
Operation	-10		55	°C	
Storage			30	°C	
Plastic Housing		84x82x55		mm	IP55, UL-V0 HB
Applicable norms					
EN 61000-4-2		CE			
EN 300-220-1 V2-4-1					
EN 301 489 V1-6-1					
CE & RoHS					