Smart Metering | Smart Building | Smart Energy

LoRaWAN™ PRESS'O SENSOR

Press'O is a LoRaWAN™ Class A sensor transforming any gauge type of 0-10V, 4-20mA analog sensor into a remote wireless sensor that monitors, controls and radio transmit any fluid level (water, oil, gaz…)

APPLICATIONS

- Water resource management – monitor and measure water level (water tower, water tank, rainwater tank, groundwater, retention pond...)
- Building management – monitor and measure fluids level (buried oil tank, aboveground oil tank, gas tank …)

BENEFITS & KEY FEATURES

- LoRaWAN™, Class A
- Easy to use and deploy
- 0-10V and 4-20mA analog input
- Selector switch for analog input type
- Data compression for batch reporting
- Power supply of the gauge connected to the sensor
- Operation on battery or via external power supply
- Up to 5 years battery autonomy
- IP55

QUALITY & RELIABIITY

- RoHS compliant
- CE Compliant
- FCC Compliant

The PRESS'O sensor from nke Watteco is a long range, low power consumption, high performance and high quality, LoRaWAN™ Class A device transforming any type of 0-10V, 4-20mA analog sensor into a Wireless Sensor.

PRESS'O is specifically designed for users looking to remotely monitor and measure fluid level of all kinds (water, oil, gas…).

A specific embedded electronic system enable to manage the power supply of the gauge connected to the sensor.

PRESS'O can operate either from a 3.6V lithium battery or from an external 9V-15V/300mV power supply.

The measured parameters can be locally stored, concatenated and compressed. This unique batch mechanism significantly reduce the amount of data transmission for demanding applications and drastically increase the autonomy up to 5 years (24 measurement per day & 1 transmit per day) when operating on battery.

NKE WATTECO, YOUR PARTNER IN SMART SENSORS & ACTUATORS

We are a European leader in designing and manufacturing highly reliable and low power consumption smart sensors, actuators and multiprotocol remote data solutions.

nke Watteco is an adopter member of the LoRa® Alliance

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LoRaWAN™ PRESS'O SENSOR

TECHNICAL CHARACTERISTICS

RF TRANSCEIVER	
Frequency (MHz)	EU: 863-870 US: 902-928
Transmit Power (dBm)	+14
Receiver Sensitivity (dBm)	-140
FIRMWARE	
Protocol	LoRaWAN™, Class A
Transmission cycles	10mn, 1h, 12h or defined by network
Data history	available
Activation method	Activation by Personalization (ABP) Over-The-Air Activation (OTAA)
Data encryption	AES128
INPUT CHARACTERISTICS	
Number of inputs	2: one 4-20mA or one 0-10V. Only one input can be used. No possibility to use both inputs simultaneously
OUTPUT CHARACTERISTICS	
4-20mA gauge voltage supply (V)	10
0-10V gauge voltage supply (V)	14
POWER	
Power supply	3,6V / 3600mAh lithium battery 9V-15V / 300mW external power supply
Autonomy within a +10°C to +25°C temperature range	5 years for 24 measurements & 1 transmission per day
INTERFACE	
Buzzer Indicator	Network pairing & configuration
Magnetic switch	Reset, ON/OFF
Dimension (mm)	84x82x85
IP Class	IP55 (IP68 on demand)
ENVIRONMENTAL	
Operating temperature (°C)	-20 / +50
Storage temperature (°C)	-10 / +30
DIRECTIVES & STANDARD	
EN, 61000-4-2 EN 300-220-1 V2-4-1, EN 301 489 V1-6-1 CE, FCC part 15.247 subpart C, RoHS recommendation compliant	

ORDERING INFORMATION

REFERENCE	DESCRIPTION
50-70-017	LoRaWAN™ PRESS'O Sensor

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