WATTECO


SMART METERING


SMART BUILDING


SMART INDUSTRY

PRESS'O+

LoRaWAN

Thanks to its Pulse S0 interface, **PRESS'O+** can also be used to remotely read metering data from a meter. It turns existing meters into smart meters via a public or private LoRaWAN® network.

APPLICATIONS

- Water resource management – Monitor and measure water level (water tower, water tank, rainwater tank, groundwater, retention pond...).
- Building management – Monitor and measure fluid level (buried oil tank, aboveground oil tank, gas tank…).
- Remote reading of water, electricity or energy meters with a pulse output.
- Report I/O status.

BENEFITS & KEY FEATURES

- LoRaWAN®, Class A
- Easy to use and deploy
- 1x input for pulse counting and/or status reporting
- 1x 0-10V analog input
- 1x 4-20mA analog input
- Stabilised and switched 10V or 14V power supply, to manage the power supply of the gauge connected to the sensor
- Differential data compression
- Battery or 9 - 24V power supply operation
- 5-year battery life (data compression mode).
- IP55

CERTIFICATION

- RED, RoHS

Sensors delivered without WATTECO marking

The **PRESS'O+** sensor is a long range, low power consumption, high performance and high quality LoRaWAN® Class A device that transforms any type of 0-10V, 4-20mA analog sensor into a wireless sensor.

PRESS'O+ can also remotely report the I/O status (On/Off switching) of industrial equipment such as pressure switches, pumps, fans, valves, heaters…

The **PRESS'O+** digital input is compatible with Pulse S0 interface to remotely read metering data from a meter.

PRESS'O+ is designed for users looking to remotely monitor and measure any kind of fluid level.

A specific embedded electronic system is used 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-24V/500mV power supply.

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

THE LARGEST IOT PRODUCTS RANGE FOR YOUR PROJECT

WATTECO is a European leader in the design and manufacture of smart IoT devices to suit all remote reading and data collection solutions.

WATTECO is a LoRa Alliance® member.

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PRESS'O+

TECHNICAL DATA

RF TRANSCEIVER	
Frequency (MHz)	EU: 863-870
Transmit Power (dBm)	+14
Receiver Sensitivity (dBm)	-140
FIRMWARE	
Protocol	LoRaWAN®, Class A
Transmission cycles	Configurable from 10 minutes to 24 hours
Data compression	Yes (differential coding)
Activation method	Activation by Personalization (ABP) or Over-The-Air Activation (OTAA)
Data encryption	AES128
INPUT CHARACTERISTICS	
Number of inputs	1x 4-20mA 1x 0-10V 1x Pulse S0 : Impedance > 1 MW; Capacitance 1nF (typical); Voltage 0 to 30V; Current 3.5µA; Pulse counting from 1Hz to 100Hz; or reporting on change of state
OUTPUT CHARACTERISTICS	
4-20mA gauge voltage supply (V)	10
0-10V gauge voltage supply (V)	14
POWER SUPPLY	
Voltage	3.6V / 3600mAh – Replaceable lithium battery 9V-24V / 500mW – External power supply
Autonomy in a range of +10°C to +25°C	5 years with 24 measurements & 1 transmission per day
INTERFACE	
Buzzer Indicator	Network pairing & configuration
Magnetic switch	Reset, ON/OFF
ENCLOSURE	
Size (mm)	92 x 92 x 56
IP Rating	IP55
ENVIRONMENT	
Operating temperature (°C)	-20 to +50
Storage temperature (°C)	-10 to +30
DIRECTIVES & STANDARD	
Radio Equipment Directive 2014/53/EU, RoHS	CE

PRODUCT NUMBER

REFERENCE	DESCRIPTION
50-70-189	LoRaWAN® PRESS'O+ Sensor