

Wireless Process Pressure Sensor



Smart Agriculture, Smart Building, Smart City, Smart Energy, Smart Facility, Smart Factory, Smart Farm, Smart Retail, Smart Utilities

SKU: WS433-M12F-PPS

WIRELESS SENSOR WS433-M12F FITTED WITH PRESSURE SENSOR



WS433-M12F-H2.PNG

Safe Zone

Hazardous Zones

Wireless Process Pressure Sensor is a combination of wireless sensor transmitter WS433-M12F and sensor PPS, it has different kind of measurement, such as Gage/ Absolute/ Differential, range -1~700 bar, high accuracy and stability, Ultra-low power consumption.

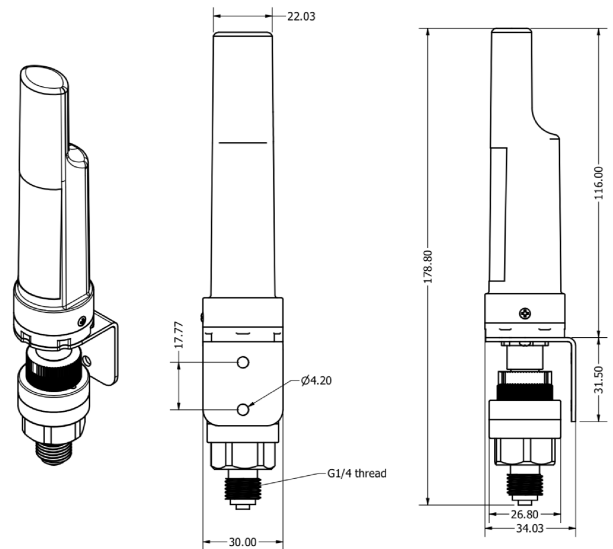
Applications

Water Pressure Pipeline Monitor, Process Monitoring, Smart Irrigation, Fuel Monitoring, Level Monitoring, Safety Monitoring

Notes For Applications

- Reliable & Secured Wireless Connection**
Sub-GHz technology from Texas Instruments allows reliable wireless connection and secured data by AES-128
- 10-year with a single battery**
Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology from Texas Instruments allow the sensor can last up to 10 years with a single battery AA.
- High accuracy**
0.5% of Span
- Wide measurement range**
Select from -1~700 bar

DIMENSION DRAWINGS OF PRESSURE SENSOR WITH WIRELESS MODULE



PPS-H5.PNG

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Specification

SENSOR:	
Sensing Technology	Advanced Piezo/ Capacitance technology
Measuring range	Select from -1~35 bar Gage/ Absolute/ Sealed Gage
Over pressure protection	1.5 x Span
Accuracy & Stability	0.5% of span, < 0.3% span/year
Measuring Fluids	Any fluid which is workable with wetted materials 304SS/316SS
Working temperature	-10~80°C
Process connection	Standard G1/4 or Others (consult factory)
Electrical connection M12-male connector	undefined
WIRELESS TRANSMITTER:	
Data speed	Up to 50kbps
Transmission distance, LOS	1000m
Antenna	Internal Antenna
Battery	01 x AA 1.5-3.6VDC, up to 10-year operation, depends on configuration
Frequency Band	ISM 433MHz, Sub-GHz technology from Texas Instrument, USA
International Compliance	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Vietnam Type Approval Certification	QCVN 73:2013/BTTTT, QCVN 96:2015/BTTTT (DAVITEQ B00122019)
Security Standard	AES-128
Operating temperature of PCB	-40~60°C (with AA L91 Energizer)
Housing	Poly-carbonate, IP67
Installation method	L-type bracket SUS304 , by M4 screws or double-sided 3M tape (included)
Product dimensions & net weight	180x30x30mm, < 150g

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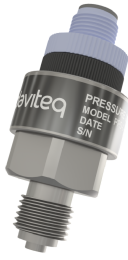
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PROCESS PRESSURE SENSOR MODULE
PPS-



GAUGE PRESSURE
ABSOLUTE PRESSURE

RANGE : -1 ... + 35 BARG
OVER PRESSURE : 1.5X
ACCURACY : 0.5% OF SPAN
WORKING TEMPERATURE : -10 ... +80 oC

PPS-H1.PNG

CONNECT WITH THERMOCOUPLE
TEMPERATURE SENSOR



Thermocouple
Temperature Sensor

WSLRWAL-TC-H3.JPG

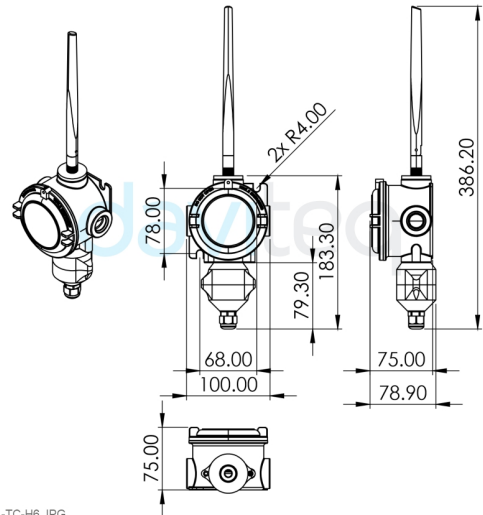
LoRaWAN SENSOR CONNECT WITH
THERMOCOUPLE SENSOR VIA PG9 CONNECTOR



PG9 Connector
Sensor Input Port

WSLRWAL-TC-H4.JPG

DIMENSION DRAWING OF WIRELESS NODE
(Unit: mm)



WSLRWAL-TC-H6.JPG

RECOMMENDED BATTERIES FOR **LoRaWAN** NODE

LS 26500 Lithium battery



-60°C..+85°C working temperature

Low self-discharge rate

7.7 Ah Capacity

WSLRWAL-TC-H7.JPG

WHAT'S IN THE PACKAGE?



Main Device

Antenna

Accessories

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Ordering Information

ITEM CODE	DESCRIPTIONS
WS433-M12F	Wireless Sensor Transmitter 433MHz, compatible with all DULP sensor modules, AA 1.5VDC battery, IP67
PPS-G-10	Gage Pressure Sensor DULP Module, range 0-10 barg, accuracy 0.5%, process connection G1/4-male, 304SS, electrical connector M12-male
Notes	* Must order for both wireless transmitter and sensor module

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