

# EX D APPROVED LORAWAN PROCESS PRESSURE SENSOR

## Ex D APPROVED LoRaWAN PROCESS PRESSURE SENSOR WSLRWEX-PPS

**LoRaWAN**



WSLRWEX-PPS-H1.JPG

WSLRWEX-PPS is the LoRaWAN Integrated Process Pressure Sensor with Exd approval for installation in Zone 1, Zone 2 or Safe Zone, and it has different kinds of measurements, such as Gage/Absolute/Sealed Gage, range -1 .. + 1000 bar, high accuracy, and stability. With Ultra-low-power design and smart firmware allow the sensor can last up to 10 years with a single C battery (depending on configuration). It can support all LoRaWAN frequency bands in the World.

Typical applications are pressure monitoring of oil pipelines, gas pipelines, LPG tanks, CNG tanks, etc.

✓ **LORAWAN COMPLIANT**  
LoRaWAN Specification V1.0.3

✓ **10 YEAR BATTERY**  
Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allows the sensor can last up to 10 years with a single battery C

✓ **HIGH ACCURACY & STABLE**  
Advanced PIEZO technology to deliver high accuracy and stable measurement

✓ **EXD DESIGNS**  
Exd approval for installation in Zone 1, Zone 2 or Safe Zone

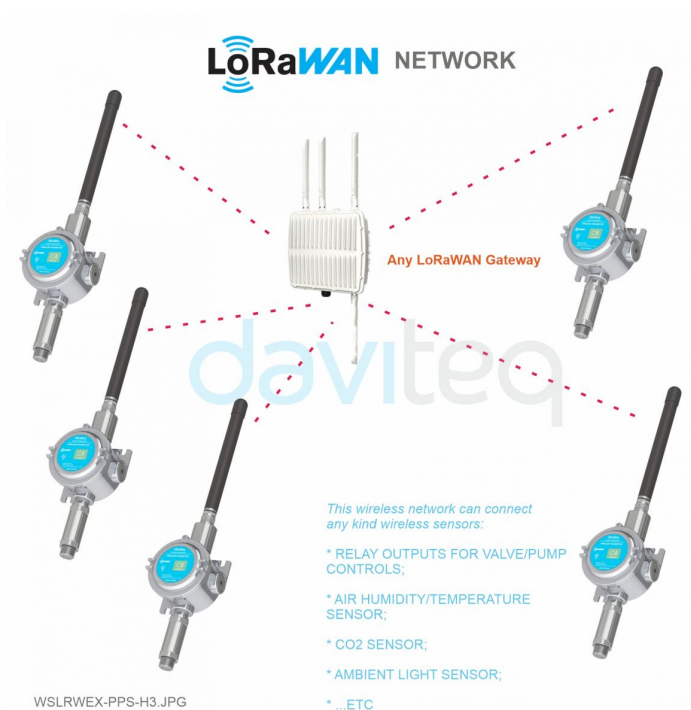
### PRESSURE SENSOR INSTALLED ON THE WATER PIPE



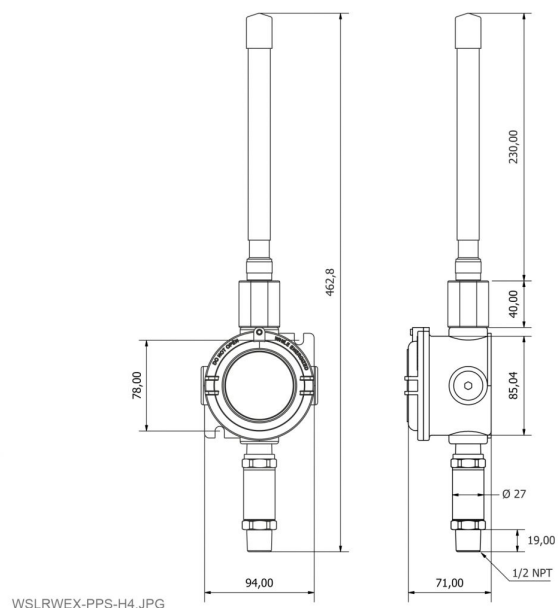
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SPECIFICATION

Sensor	Advanced PIEZO technology
Measurement range	Select from -1 .. + 1000 bar Gage/Absolute/Sealed Gage (Over pressure protection: 1.5 x Span)
Accuracy & Stability	0.5% of span, < 0.3% span/year
Wetted parts & Measuring Fluids	304SS/316SS, Any fluid which is workable with materials 304SS/316SS
Process Working temperature	-40 .. + 105 oC
Process connection	1/2" NPT-male as standard, others please consult factory
Communication	LoRaWAN Class A, V1.0.3   Data rate 250bps .. 5470bps
Antenna	External Antenna
RF Frequency and Power	860..930 MHz, +14 .. +20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AS923-2, AU915, US915
Data sending modes	interval time, or when status changes, or manually triggered by a magnetic key.
Configuration	via Downlink or offline USB cable (PC software is supplied for free)
Battery	01 x C type LiSOC12 3.6V battery, not included (recommend SAFT LS26500)
Housing	Cast aluminum, IP66
Ex Certification	IMQ 14 ATEX 005 X, TÜV CY 18 ATEX 0206158 X and IECEx DEK 15.0048X
Hazardous Protection Marking	ATEX II 2G Ex db IIC T4 Gb and ATEX II 2D Ex tb IIIC T135°C Db
Standards	IEC EN 60079-0, IEC EN 60079-7 and IEC EN 60079-31
Applicable Zones	Zone 1 & 2 gas hazardous areas Zone 21 & 22 hazardous areas which contain conductive combustible dust
Ambient working temperature	-40°C to +85°C (use with SAFT LS26500)
Dimensions	H100xW100xD80 (excluded antenna)
Net-weight	~ 1500 grams (without battery)



DIMENSION DRAWING OF WIRELESS SENSOR (Unit: mm)



RECOMMENDED BATTERIES FOR LoRaWAN SENSOR

LS 26500 Lithium battery



-60°C..+85°C working temperature

Low self-discharge rate

7.7 Ah Capacity

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## ORDERING INFORMATION

ITEM CODE	DESCRIPTIONS
WSLRWEX-PPS-G10-01	LoRaWAN Process Pressure Sensor, Ex d, IP66, 0-10 barg, 316SS 1/2"NPT
Notes:	Select other pressure ranges: 1, 1.6, 2.5, 4, 6, 10, 16, 25, 40, 60, 100, 160, 250, 400, 600, 1000 BARG.