Sigfox Ex d Process Pressure Sensor

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

SKU: WSSFCEX-PPS

daviteq

Ex d approved SIGFOX Process Pressure Sensor WSSFCEX-PPS

sigfox

10-Year

IP67 WEATHERPROOF

WSSFCEX-PPS-H1.JPG

CE FC ARIB ATEX

◯ Safe Zone   ✓ Hazardous Zones

WSSFCEX-PPS is the Sigfox Integrated Process Pressure Sensor with Ex d 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 barg, high accuracy, and stability. With Ultra-low-power design and smart firmware allow the sensor can last up to 10 years with a single battery (depends on configuration). It can support all regions of Sigfox network in over the World, RC1, RC2, RC3, RC4, RC5, RC6, RC7. Typical applications are pressure monitoring of oil pipeline, gas pipeline, LPG tank, CNG tank, etc.

Applications
Oil & Gas Pipeline Monitor, Process Monitoring, Safety Monitoring

Notes For Applications

- Sensor Materials Compatibility: Choose materials that won't react with the substances or degrade in corrosive media.
- Environmental Conditions: Consider the system environment (pipes, vibrations, temperature, etc.).
- Pressure Range: Choose sensors that function well within the process range.
- Precision and Sensitivity: Determine the required level of precision and sensitivity.
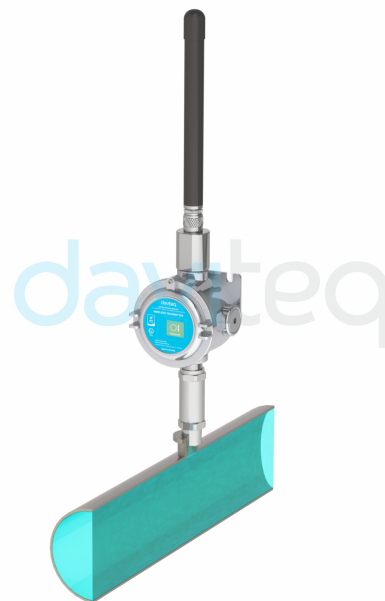
✓ **Sigfox Ready**
Device are best operating performance on the SIGFOX network

✓ **10-Year battery**
Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow 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

✓ **Ex d Zones 1-2-21-22**
Ex d approval for installation in Zone 1, Zone 2 or Safe Zone

PRESSURE SENSOR INSTALLED ON THE GAS PIPE

WSSFCEX-PPS-H2.JPG

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℃
Process connection	½" NPT-male as standard, others please consult factory
COMMUNICATION	
Sigfox zones	RC1~RC7
Antenna	N-male type external Antenna
Battery	02 x AA Type 1.5VDC as standard, working time up to 10 years (depends on configuration). 02 x Battery AA 3.6V is also available as optional.
ATEX Certificates	IMQ 14 ATEX 005 X, TÜV CY 18 ATEX 0206158 X and IECEx DEK 15.0048X
Marking	ATEX II 2G Ex db IIC T5/T6 Gb and ATEX II 2D Ex tb IIIC T100/T85℃ Db
Directive	ATEX 2014/34/EU
Standards	IEC-EN60079-0 IEC-EN60079-1 IEC-EN60079-31
Applicable zones	Zone 1 - 21 (gas) and Zone 2 - 22 (dust)
Ambient working temperature	-40~85℃
Housing	Cast aluminium, powder coated, IP66
Mounting	wall mounting holes
Product dimensions	H520xW100xD80 (included antenna)
Net weight	1.5kg
Packaging dimension	W160 x D150 x H250 mm
Gross weight	< 1.6kg

Ex d approved SIGFOX Dual Pressure Sensor

WSSFCEX-PPS-H3.JPG

SYSTEM ARCHITECTURE

Sigfox stations
Over 1 million messages can be processed per base station per day

Sigfox CLOUD™
Web interface
API
Callbacks

IoT Platforms   Customer IT

Sigfox Sensors
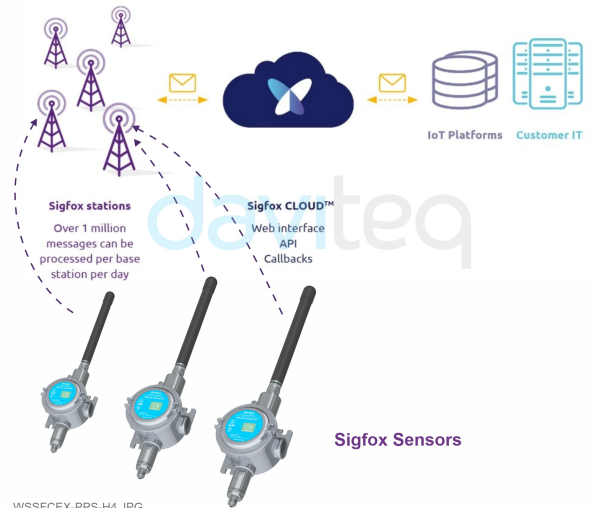
WSSFCEX-PPS-H4.JPG

DIMENSION DRAWING OF WIRELESS SENSOR HARDWARE VERSION OF 3

230,00
514,00
40,00
85,04
78,00
Ø 27
94,00
71,00
19,00
1/2 NPT
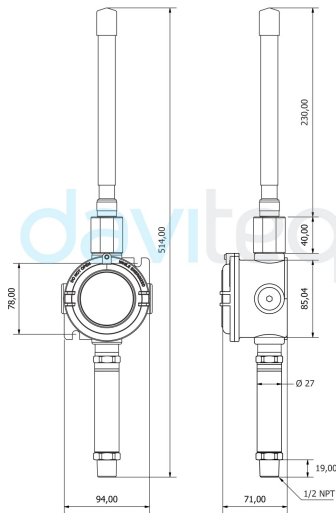
WSLRWEX-PPS-H4.JPG

(Unit: mm)

RECOMMENDED BATTERIES

LS 26500 Lithium battery

-60°C..+85°C working temperature

Low self-discharge rate

7.7 Ah Capacity

Ordering Information

ITEM CODE	DESCRIPTIONS
WSSFCEX-PPS-X-01	Sigfox-Ready Process Pressure Sensor, Ex d, IP66, 0-X barg range, 316SS 1/2"NPT
Where	
X	Pressure range, please select X = 1, 1.6, 2.5, 4, 6, 10, 16, 25, 40, 60, 100, 160, 250, 400, 600, 1000 BARG.