

# Sub-GHz Ex d Process Pressure Sensor



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

SKU: WS433EX-PPS

Safe Zone

Hazardous Zones

## Ex D APPROVED WIRELESS PROCESS PRESSURE SENSOR WS433EX-PPS



WS433EX-PPS-H1.JPG

WS433EX-PPS is the Sub-GHz Integrated Process Pressure Sensor with Ex d approval for installation in Zone 1, Zone 2, or Safe Zone. It has different measurements, such as Gage/ Absolute/ Sealed Gage, range -1~1000 bar, high accuracy, and stability. With an Ultra-low-power design and smart firmware, the sensor can last up to 10 years with a single C battery (depends on configuration). The sensor will connect to a Wireless Coordinator WS433-CL or iConnector with the built-in wireless coordinator.

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

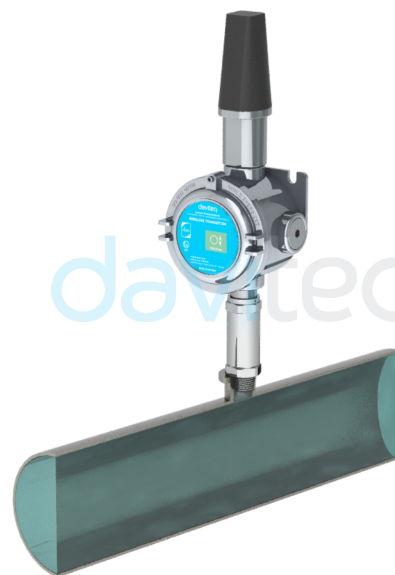
**Wireless Sub-GHz Technology**  
Reliable, long distance and ultra-low-power wireless technology

**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 Designs**  
Ex d approval for installation in Zone 1, Zone 2 or Safe Zone

## PRESSURE SENSOR INSTALLED ON THE GAS PIPE



WS433EX-PPS-H2.JPG

## DAVITEQ TECHNOLOGIES INC

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Created date: Dec-21-2022


Updated date: Nov-08-2025


## 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°C
Process connection	1/2" NPT-male as standard, others please consult factory
Connectivity	Sub-GHz, ISM free license 433MHz band
Antenna	N-male type external Antenna
Battery	01 x C Type LiSOCl <sub>2</sub> , working time up to 10 years (depends on configuration). The battery is not included.
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°C 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°C
Housing	Cast aluminium, powder coated, IP66, wall mounting
Product dimensions	H100xW100xD306 (included antenna)
Net weight	1.5kg
Packaging dimension	W150 x D150 x H250 mm
Gross weight	< 1.6kg

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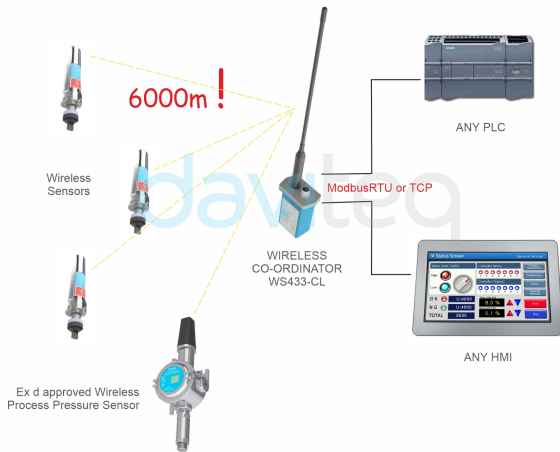
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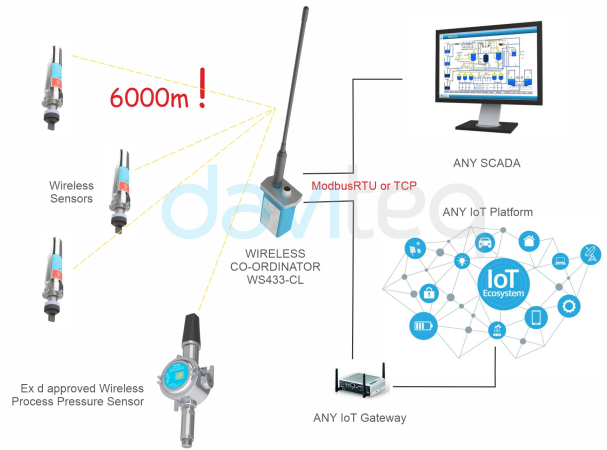
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CONNECT WIRELESS SENSORS TO any PLC or HMI



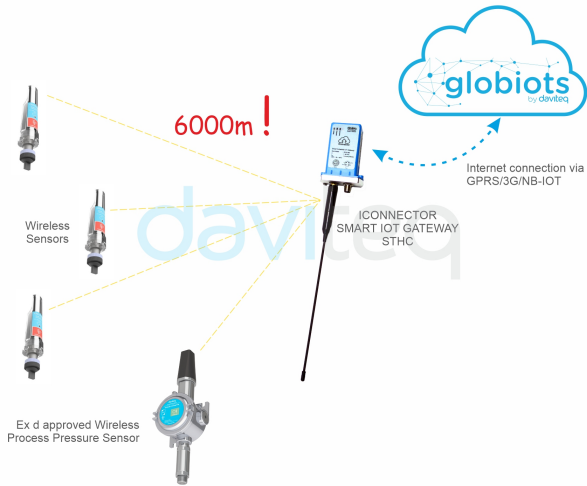
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CONNECT WIRELESS SENSORS TO any SCADA or IoT Platform



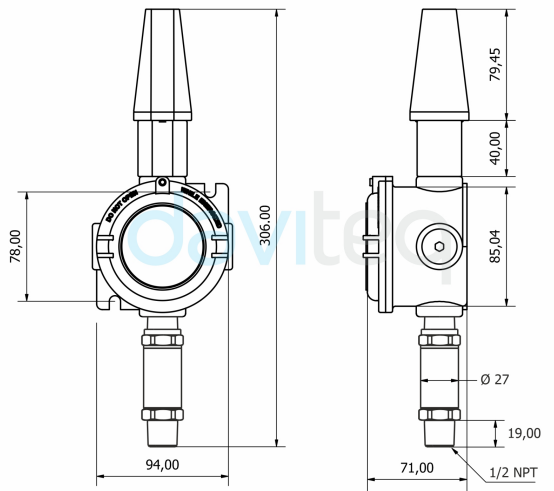
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CONNECT WIRELESS SENSORS TO GLOBIOTS Platform



WS433EX-PPS-H5.JPG

DIMENSION DRAWING OF WIRELESS SENSOR (Unit: mm)



WS433EX-PPS-H6.JPG

RECOMMENDED BATTERIES FOR WS433EX-PPS

LS 26500 Lithium battery



-60°C..+85°C working temperature

Low self-discharge rate

7.7 Ah Capacity

WS433EX-PPS-H7.JPG



WS433EX-PPS-H8.JPG

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## Ordering Information

ITEM CODE	DESCRIPTIONS
WS433EX-PPS-G10-01	Process Pressure Sensor with Sub-GHz 433MHz, Ex d, IP66, 0-10 barg, 316SS 1/2"NPT
WS433EX-PPS-G10-02	Process Pressure Sensor with Sub-GHz 433MHz, Ex d, IP66, 0-10 barg, 316SS 1/4"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.

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