

# Wireless Process Temperature Sensor



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

SKU: WS433-M12F-PTE

## WIRELESS PROCESS TEMPERATURE SENSOR WS433-M12F-PTE



WS433-M12F-PTE-H1.PNG

Safe Zone

Hazardous Zones

Wireless Process Temperature Sensor is a combination of wireless sensor transmitter WS433-M12F and Process Temperature Sensor PTE, utilizes digital temperature sensor delivers high accuracy measurement in range -20~85°C. Easy connect to WS433-M12(-T) via M12 connector. Optional 1m extension cable can be used for some special case. This sensor is mainly used to measure temperature of chiller water, food liquid, chemical of any liquid, compressed air, nitrogen, oxygen, ammonia gas... With Sub-GHz technology from Texas Instruments allows long range transmission at ultra-low power consumption. It is configured the operation parameters like data sending interval, health check cycle... remotely from Globiots platform or via ModbusRTU software. The wireless sensor can last up to 10 years with a single AA battery.

### Applications

Temperature Monitoring, Process Monitoring, Safety Monitoring

### Notes For Applications

- For Gas or Liquid**  
For measuring temperature of chiller water, food liquid, chemical of any liquid, compressed air, nitrogen, oxygen, ammonia gas...
- Plug & Play**  
Just plug the pressure module onto WS433-M12F via M12 connector, then it works automatically
- High accuracy**  
Digital sensor with factory-calibration
- High Pressure**  
Can withstand up to 20 barg process pressure

## CONNECT WIRELESS SENSORS TO any PLC or HMI



WS433-M12F-PTE-H2.PNG

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## Specification

SENSOR SPECIFICATION :	
Sensor	Digital type, factory calibrated, IP67, immersible to ice-water for quick validation
Measuring range	-20~85°C
Accuracy & Resolution	±0.5°C, 0.125°C
Probe length & Material	50, 100 & 200mm, 304SS
Process Pressure	-1 to 20 barg
Process Connection	1/2-14 NPT
Electrical connection	M12-male connector
WIRELESS TRANSMITTER SPECIFICATION :	
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 & weight	125x30x30mm, < 60g (without battery)
Box dimension & gross weight	190x50x50mm, < 100g

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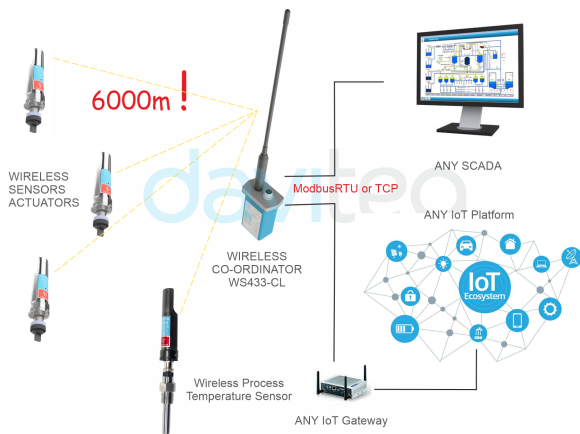
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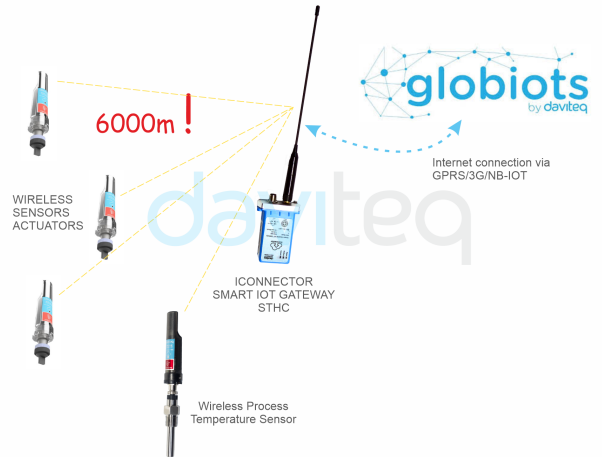
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CONNECT WIRELESS SENSORS TO any SCADA or IoT Platform



WS433-M12F-PTE-H3.PNG

CONNECT WIRELESS SENSORS TO GLOBIOTS Platform



WS433-M12F-PTE-H4.PNG

PROCESS TEMPERATURE SENSOR MODULE



WS433-M12F-PTE-H5.PNG

PROCESS TEMPERATURE SENSOR MODULE WITH CABLE



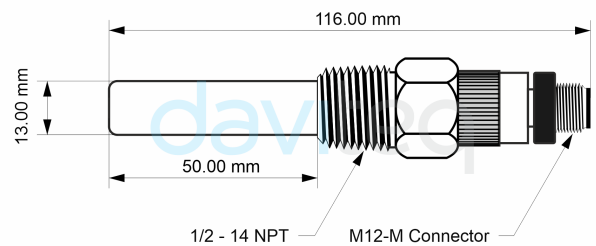
WS433-M12F-PTE-H6.PNG

1M EXTENSION CABLE M12 CONNECTOR



WS433-M12F-PTE-H7.PNG

DIMENSIONS



WS433-M12F-PTE-H8.PNG

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## Ordering Information

ITEM CODE	DESCRIPTIONS
PTE-11-050	Process Temperature Sensor, -20~85°C range, DULP communication, 50mm Probe length, 304SS wetted material, 1/2"-14 NPT Male process connector, PN20, M12-male connector, IP67
PTE-11-100	Process Temperature Sensor, -20~85°C range, DULP communication, 100mm Probe length, 304SS wetted material, 1/2"-14 NPT Male process connector, PN20, M12-male connector, IP67
PTE-11-200	Process Temperature Sensor, -20~85°C range, DULP communication, 200mm Probe length, 304SS wetted material, 1/2"-14 NPT Male process connector, PN20, M12-male connector, IP67
SECB-11-1000	DULP sensor extension cable 1000mm, M12-F and M12-M connectors, Shielded cable, 4-cores, IP67
WS433-M12F	Wireless Sensor Transmitter 433MHZ, compatible with all DULP sensor modules, AA 1.5VDC battery, IP67
Notes	*Please select sensor probe then select the wireless transmitter module WS433  **Select extension cable when needed

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