

Wireless Room Differential Pressure Sensor



Smart Agriculture, Smart Building, Smart Facility, Smart Farm, Smart Healthcare, Smart Retail, Smart Transportation

SKU: WS433-ADP

Safe Zone

Hazardous Zones

CLEAN ROOM DIFFERENTIAL PRESSURE WIRELESS SENSOR

Wireless Room Differential Pressure Sensor utilizes the advanced Piezo technology from Germany allows high accuracy, stable and ultra-low power consumption.



WS433-ADP-H1.PNG

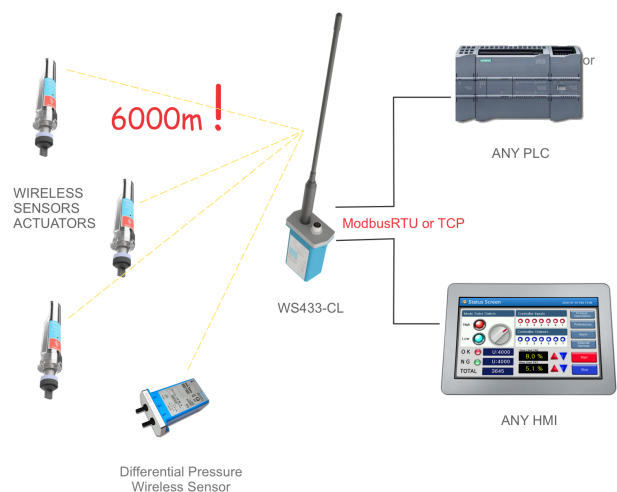
Applications

Automatic Ventilation System, Indoor Air Quality Monitor, Flow 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**
3% of reading, drift is only 0.05 Pa/year
- Environment Protection**
REACH & RoHS compliance

CONNECT WIRELESS SENSORS TO any PLC or HMI



WS433-ADP-H2.PNG

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Created date: Dec-21-2022


Updated date: Aug-28-2024

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Specification

SENSOR SPECIFICATION :	
Sensing Technology	Advanced CMOS technology from Germany
Measuring range & accuracy	-125Pa~125Pa, 3% reading
Zero accuracy & repeatability	0.08Pa, 0.04Pa
Temperature drift & Offset stability	< 0.5% reading per 10°C, < 0.05Pa/ year
Measureable Gases	AIR, O ₂ , N ₂ (No condensation)
Working temperature	-20~85°C
Wetted parts	PBT, glass (silicon nitride, silicon oxide), silicon, gold, FR4, silicone as static sealing, epoxy, copper alloy, lead-free solder
Process connection	gas tube 6x4mm
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	Aluminum & Poly-carbonate, IP67
Installation method	wall mount bracket SUS304
Product dimensions & weight	H106xW73xD42, < 190g (without battery)

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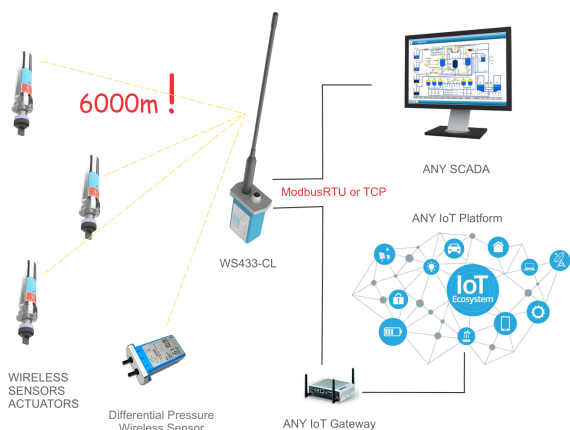
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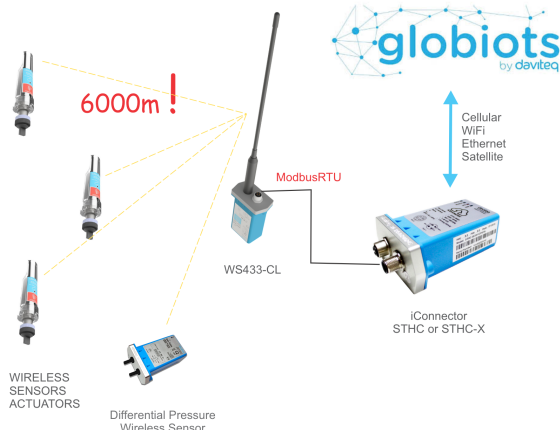
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CONNECT WIRELESS SENSORS TO any SCADA or IoT Platform



WS433-ADP-H3.PNG

CONNECT WIRELESS SENSORS TO GLOBIOTS Platform



WS433-ADP-H4.PNG

RECOMMENDED BATTERIES

E91 AA Alkaline battery



-18 .. + 60 oC working temperature
10-year shelf life
3000 mAh Capacity
Price: 1X

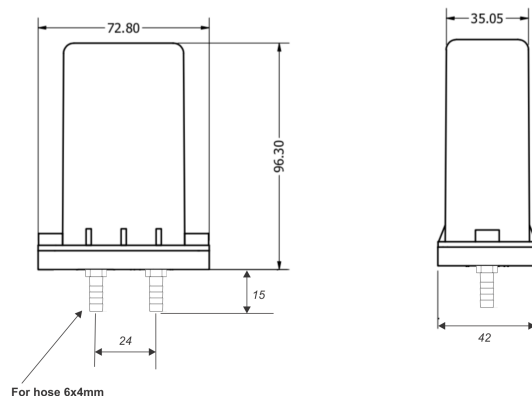
L91 AA Lithium battery



-40 .. + 60 oC working temperature
20-year shelf life
3500 mAh Capacity
Price: 3.5X

WS433-ADP-H5.PNG

DIMENSION DRAWING WS433-ADP



WS433-ADP-H6.PNG

CARTON BOX OF WIRELESS SENSOR



SIZE: 50x50x190MM

WS433-AC-H7.PNG

RECOMMENDED BATTERIES FOR WIRELESS SENSOR WS433

E91 AA Alkaline battery



-18 .. + 60 oC working temperature
10-year shelf life
3000 mAh Capacity
Price: 1X

L91 AA Lithium battery



-40 .. + 60 oC working temperature
20-year shelf life
3500 mAh Capacity
Price: 3.5X

WS433-AC-H8.PNG

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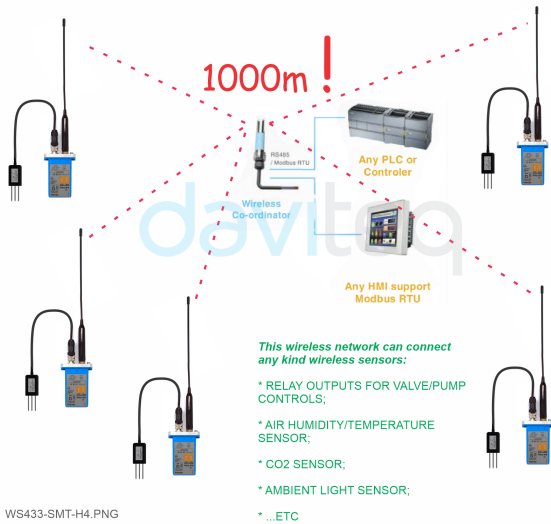
SOIL MOISTURE SENSOR INSTALLATION



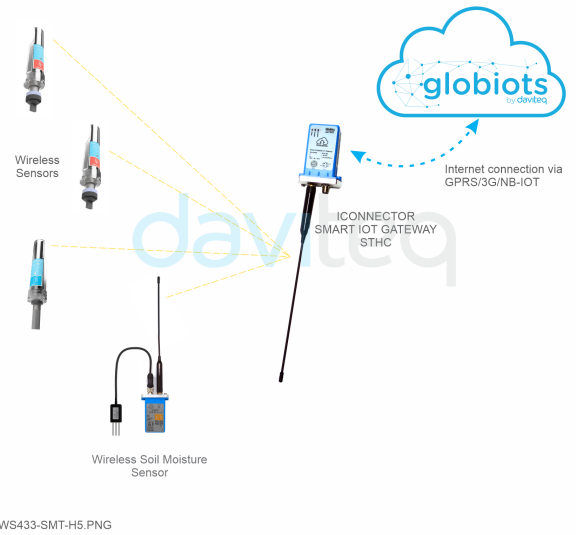
INSTALLATION FOR MULTI-LAYER MEASUREMENT



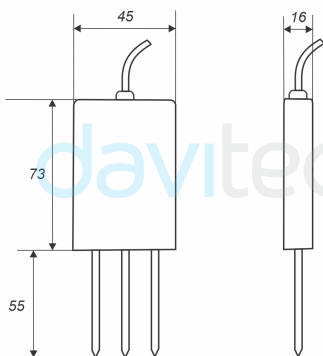
40 WIRELESS SENSORS CONNECT TO ONE CO-ORDINATOR



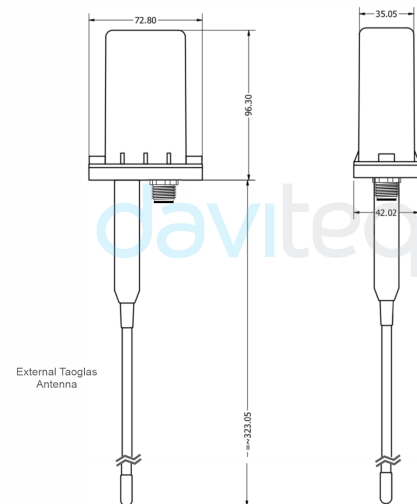
CONNECT WIRELESS SENSORS TO GLOBIOTS Platform



DIMENSION DRAWINGS OF SENSOR (Unit: mm)



DIMENSION DRAWINGS OF WIRELESS SENSOR (Unit: mm)



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Ordering Information

ITEM CODE	DESCRIPTIONS
WS433-ADP-21	Wireless Room Differential Pressure Sensor, ± 125 Pa, Acc 3.0% of reading value, IP67, battery AA 1.5-3.6VDC

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