

Wireless Sensor Digital Inputs



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

SKU: WS433-DI

DIGITAL INPUT - STATUS DETECTOR WIRELESS SENSOR WS433-DI



WS433-DI-H1.PNG

Safe Zone

Hazardous Zones

Wireless sensor with 2 channel digital inputs to detect logic status 0/1 OR counting pulses from proximity sensor, limit switch, machine output, pressure switch... It is configured the operation parameters like data sending interval, health check cycle... remotely from Globiots platform or via ModbusRTU software. The wireless module can last up to 10 years with a single AA battery.

Applications

Process Monitoring, Safety Monitoring, Energy Monitoring, Electric Meter Reading, Gas Meter Reading, Water Meter Reading, Production Monitoring

Notes For Applications

- Accept the dry-contact output or voltage output with a max of 3.3V;
- Consider the shortest signal cable to avoid noise, especially for high-speed pulse applications;
- Recommend using the shielded cable with twisted pairs;
- Take note of the signal's duty cycle to meet this device's requirement.

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.

Multiple Functions
Logic detecting or Pulse counting with non-volatile memory

Long range Transmission
Narrow Band techniques & Sub-Ghz technology allow long distance transmission at lowest energy consumption

DIGITAL INPUT - PULSE COUNTER WIRELESS SENSOR WS433-DI



WS433-DI-H2.PNG

DAVITEQ TECHNOLOGIES INC

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Created date: Dec-21-2022


Updated date: Aug-28-2024


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Specification

Input	2 channel Digital inputs with dry-contact or voltage input (max 3.3VDC)
Functions	Logic Detecting or Pulse Counting
Logic Detecting	Max frequency 2Hz, default Filter time 300mS, adjustable 1~65535mS
Pulse Counting	Max frequency 2Hz, default Filter time 100mS, adjustable 1~65535mS
Electrical connection	shielded cable 0.5m length with PG9 cable gland
Optional accessories	304SS Adapter PG9/ male 1/2"NPT or PG13.5 or M20 to allow direct mounting on Process instruments or electrical panel
Data speed	Up to 50kbps
Transmission distance, LOS	500m
Antenna	Internal Antenna, 3 dBi
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
Receiving Sensitivity	-110dBm at 50kbps
International Compliance	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
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	125x30x30mm
Net weight (without battery)	< 100g
Box dimension	190x50x50mm
Gross weight	140g

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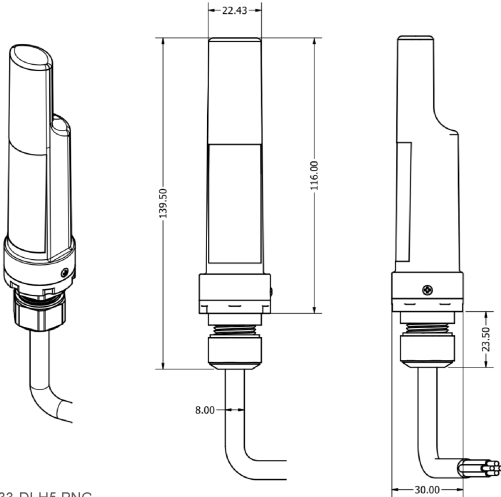
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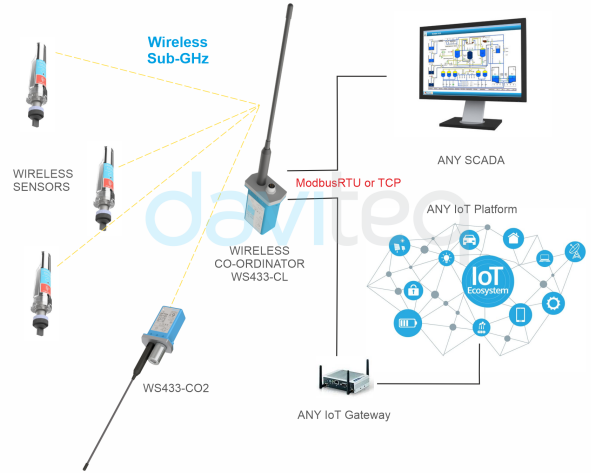
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DIMENSION DRAWINGS OF WS433 SENSOR WITH CABLE OUTPUT



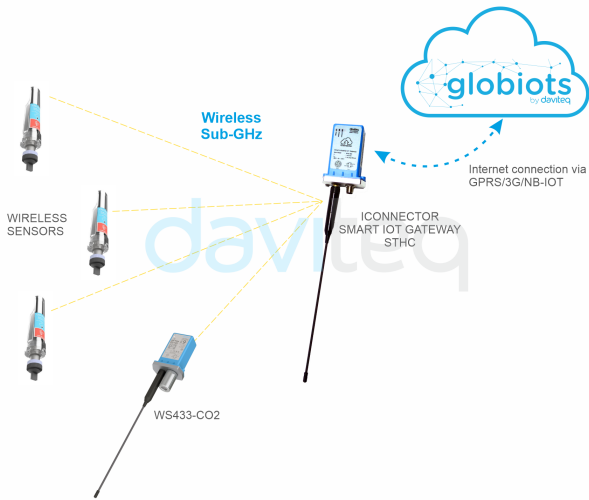
WS433-DI-H5.PNG

CONNECT WIRELESS SENSORS TO any SCADA or IoT Platform



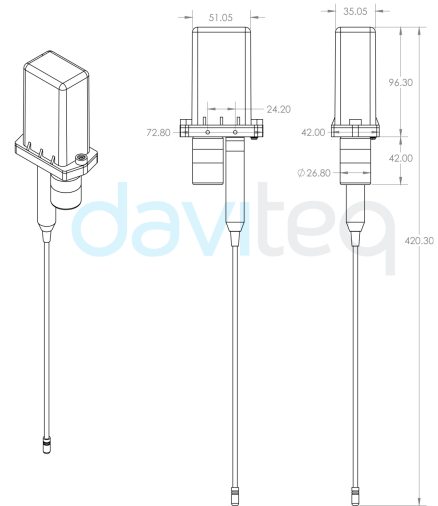
WS433-CO2-H4.PNG

CONNECT WIRELESS SENSORS TO GLOBIOTS Platform



WS433-CO2-H5.PNG

DIMENSION DRAWING OF WIRELESS SENSOR (Unit: mm)



WS433-CO2-H6.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-CO2-H7.PNG

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WS433-CO2-H8.PNG

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SOIL MOISTURE SENSOR INSTALLATION



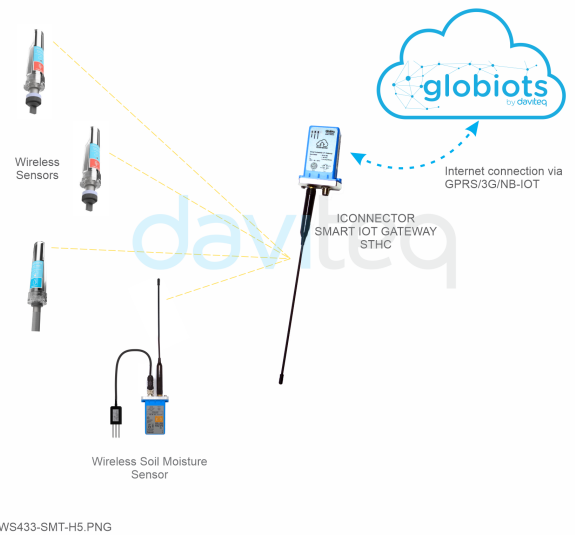
INSTALLATION FOR MULTI-LAYER MEASUREMENT



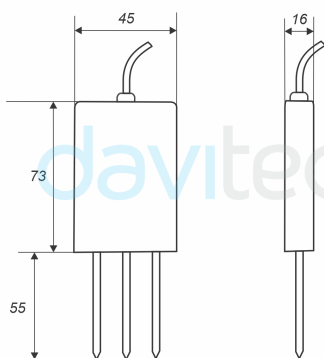
40 WIRELESS SENSORS CONNECT TO ONE CO-ORDINATOR



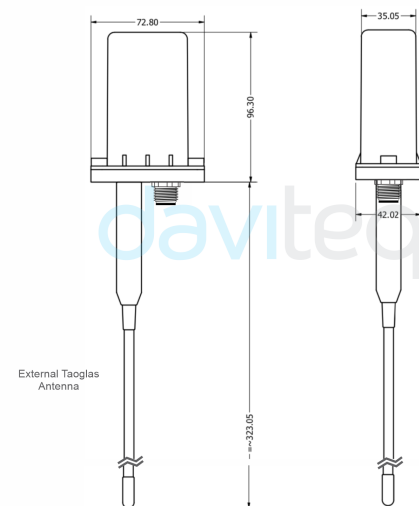
CONNECT WIRELESS SENSORS TO GLOBIOTS Platform



DIMENSION DRAWINGS OF SENSOR (Unit: mm)



DIMENSION DRAWINGS OF WIRELESS SENSOR (Unit: mm)



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Ordering Information

ITEM CODE	DESCRIPTIONS
WS433-DI-12	Wireless Sensor with 2 channel Digital inputs with dry-contact of voltage input max 3.3VDC, Logic detecting or Pulse counting IP67, battery AA 1.5 - 3.6VDC, shielded cable 0.5m length with PG9 cable gland

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