Wireless Ambient Humidity Sensor

Smart Agriculture, Smart Building, Smart Facility, Smart Farm, Smart Healthcare, Smart Retail, Smart Transportation
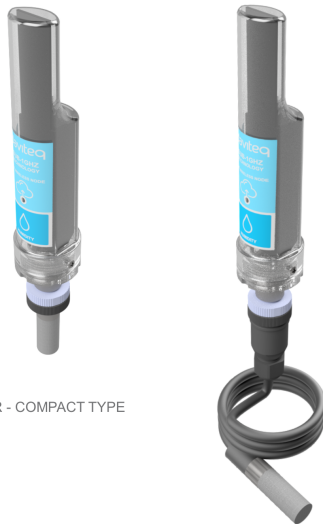
SKU: WS433-M12F-ATH

daviteq

✓ Safe Zone   ◯ Hazardous Zones

AMBIENT HUMIDITY / TEMPERATURE WIRELESS SENSOR

1000m LOS

10-Year

IP67 WEATHERPROOF

HUMIDITY SENSOR - COMPACT TYPE

HUMIDITY SENSOR - EXTENSION CABLE TYPE

WS433-M12F-ATH-H1.PNG

Wireless Ambient Humidity & Temperature Sensor is a combination of wireless sensor transmitter WS433-M12F and sensor ATH, it utilises Digital capacitance humidity sensor to deliver high accuracy and stable measurement. The wireless portion is Sub-GHz technology from Texas Instruments allows long range transmission at ultra-low power consumption. It will connect 2-way wirelessly to the wireless co-ordinator WS433-CL to send data and receiving the configuration. It can be configured the operation parameters like data sending interval, health check cycle... remotely from Globiots platform or via ModbusRTU software (thru the WS433-CL). Its default data rate is 50kbps, can be switched to 625bps to increase the communication range. It can last up to 10 years with a single AA battery. There are a lot of applications as environment monitoring for office, warehouse, data center, hospital, agriculture...

Applications

Automatic Ventilation System, Facility Monitoring, Indoor Air Quality Monitor, Warehouse Monitoring, Temperature 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 fromTexas Instruments allow the sensor can last up to 10 years with a single battery AA.

✓ **High accuracy**
Digital sensor with factory-calibration

✓ **Sintered Filter**
Alloy sintered filter to protect sensor in hash environment

AMBIENT HUMIDITY / TEMPERATURE SENSOR PROBES

0 .. 100% RH   +/- 2.0% Accuracy

ATH-12-XXX

ATH-11

WS433-M12F-ATH-H2.PNG

Specification

SENSOR SPECIFICATION :	
Sensor	Digital type, factory calibrated, output both Humidity & Temperature values
Humidity measuring range & accuracy	0~100% RH, ±2.0%
Humidity resolution	0.1%
Temperature measuring range & accuracy	-40~85℃, ±0.2℃
Temperature resolution	0.1℃
Sensor Filter	20μm Alloy sintered filter
Electrical connection	M12-male connector
WIRELESS TRANSMITTER SPECIFICATION :	
Data speed	Up to 50kbps
Tranmission 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℃ (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

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
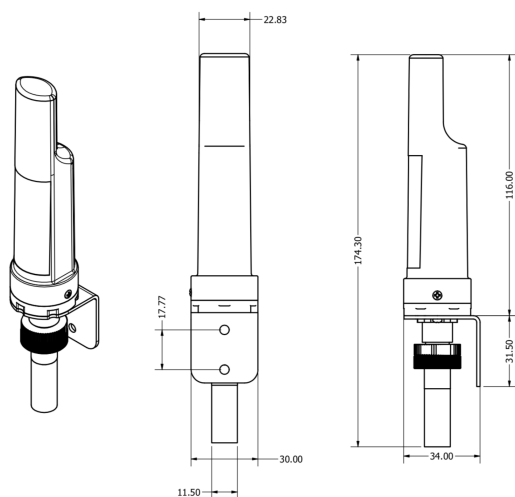
20-year shelf life

3500 mAH Capacity

Price: 3.5X

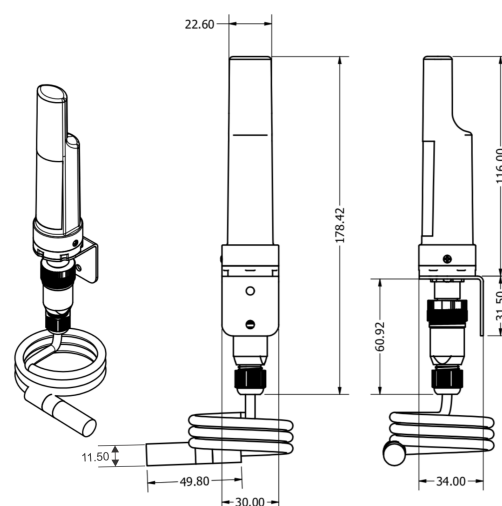WS433-M12F-ATH-H3.PNG

BATTERY INSTALLATION

TOP HOUSING REMOVED

AA 1.5VDC BATTERY

WS433-M12F-ATH-H4.PNG

DIMENSION DRAWING OF COMPACT HUMIDITY SENSOR

WS433-M12F-ATH-H5.PNG

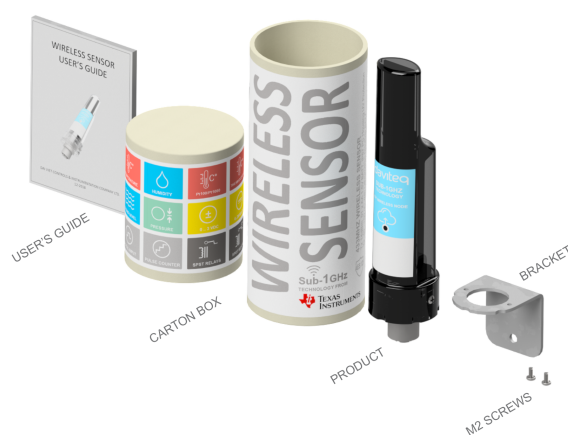## DIMENSION DRAWING OF CABLE TYPE HUMIDITY SENSOR

WS433-M12F-ATH-H6.PNG

CARTON BOX OF WIRELESS SENSOR

SIZE: 50x50X190MM

WS433-M12F-ATH-H7.PNG

PRODUCT PACKAGE INCLUDES

USER'S GUIDE

CARTON BOX

PRODUCT

BRACKET

M2 SCREWS

WS433-M12F-ATH-H8.PNG

DAVITEQ TECHNOLOGIES INC

Ho Chi Minh City, VN | Koblenz, DE | Melbourne, AU | Zurich, CH

+84.28.6268.2523 / 6268.2524

info@daviteq.com   **www.iot.daviteq.com**   Created date: Dec-21-2022 | Updated date: Aug-28-2024   3/4

Ordering Information

ITEM CODE	DESCRIPTIONS
WS433-M12F	Wireless Sensor Transmitter 433MHz, compatible with all DULP sensor modules, AA 1.5VDC battery, IP67
ATH-11	Compact ambient Humidity & Temperature Sensor DULP module, M12-male connector
ATH-12-300	300mm Cable type ambient Humidity & Temperature Sensor DULP module, M12-male connector
Notes	* Must order for both wireless transmitter and sensor module