

WIRELESS AMBIENT HUMIDITY SENSOR



SKU: WS433-M12F-ATH

AMBIENT HUMIDITY / TEMPERATURE WIRELESS SENSOR



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 50 kbps, can be switched to 625 bps 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...



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

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



WS433-M12F-ATH-H2.PNG

DAVITEQ TECHNOLOGIES INC

No.11 Street 2G, Nam Hung Vuong Res., An Lac Ward, Binh Tan Dist., Ho Chi Minh City, Vietnam
+84.28.6268.2523 / 6268.2524
info@daviteq.com

www.daviteq.com

JAN-2021 | Doc No: WS433-M12F-ATH-DS-EN-10

1/4

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 oC, +/- 0.2 oC
Temperature resolution	0.1 oC
Sensor Filter	20um Alloy sintered filter
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	-40oC..+60oC (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

WS433-M12F-ATH-H3.PNG

L91 AA Lithium battery



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

BATTERY INSTALLATION



WS433-M12F-ATH-H4.PNG

DAVITEQ TECHNOLOGIES INC

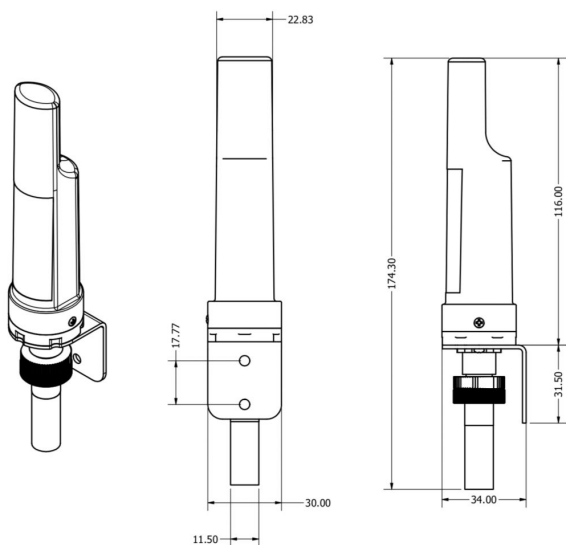
No.11 Street 2G, Nam Hung Vuong Res., An Lac Ward, Binh Tan Dist., Ho Chi Minh City, Vietnam
+84.28.6268.2523 / 6268.2524

info@daviteq.com

www.daviteq.com

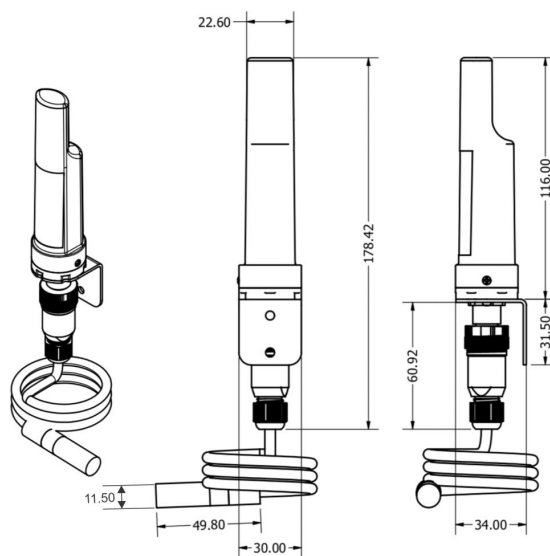
JAN-2021 | Doc No: WS433-M12F-ATH-DS-EN-10

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



WS433-M12F-ATH-H8.PNG

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