

# Wireless Ambient Temperature Sensor



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

SKU: WS433-M12F-ATE



## TEMPERATURE SENSOR FITTED WITH WS433-M12F



COMPACT SENSOR  
ATE-11

CABLE TYPE SENSOR  
ATE-12

WS433-M12F-ATE-H1.PNG

Wireless Ambient Temperature Sensor is a combination of wireless sensor transmitter WS433-M12F and ambient temperature sensor ATE, it utilizes Digital temperature sensor delivers high accuracy measurement in range  $-35\sim 70^{\circ}\text{C}$ . 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...

### Applications

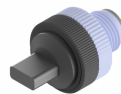
Automatic Ventilation System, Facility Monitoring, Indoor Air Quality Monitor, Warehouse Monitoring, Temperature Monitoring

### 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 from Texas Instruments allow the sensor can last up to 10 years with a single battery AA.
- ✓ **High accuracy**  
Digital sensor with factory-calibration
- ✓ **IP67 Weather-proof**  
IP67 sensor probe allows immersion into ice-water for quick validation

## AMBIENT TEMPERATURE SENSORS

ATE-11



ATE-12-XXX



$-40 \dots + 85 \text{ }^{\circ}\text{C}$       $\pm 0.5 \text{ }^{\circ}\text{C}$  Accuracy  
IP67 Protection

WS433-M12F-ATE-H2.PNG

## DAVITEQ TECHNOLOGIES INC

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Created date: Dec-21-2022


Updated date: Aug-28-2024


1/4


## Specification

SENSOR SPECIFICATION :	
Sensor	Digital type, factory calibrated, IP67, immersible to ice-water for quick validation
Measuring range	-35~70°C
Accuracy & Resolution	±0.5°C, 0.125°C
Material	PA plastic with PVC cable
Electrical connection	M12-male connector
WIRELESS SPECIFICATION :	
Data speed	Up to 50kbps
Transmission distance, LOS	500m
Antenna	Internal Antenna, 3 dbi
Battery	01 x AA 1.5VDC, 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)
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)	< 60g
Box dimension	190x50x50mm
Gross weight	100g

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2/4

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

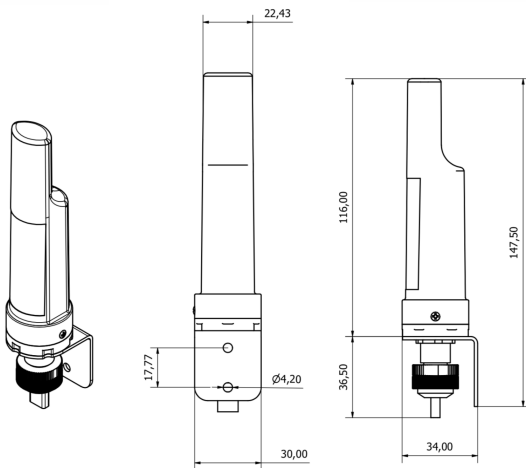
WS433-M12F-ATE-H3.PNG

BATTERY INSTALLATION



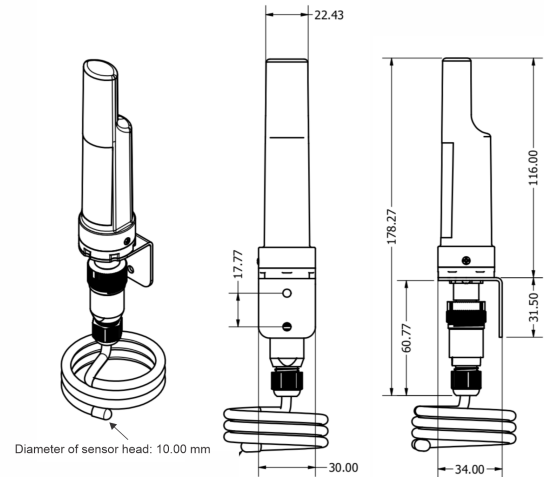
WS433-M12F-ATE-H4.PNG

DIMENSION DRAWINGS OF COMPACT TEMPERATURE SENSOR



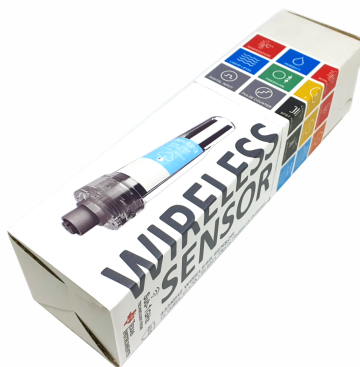
WS433-M12F-ATE-H5.PNG

DIMENSION DRAWINGS OF CABLE TYPE TEMPERATURE SENSOR



WS433-M12F-ATE-H6.PNG

CARTON BOX OF WIRELESS SENSOR



SIZE: 50x50x190MM

WS433-M12F-ATE-H7.PNG

PRODUCT PACKAGE INCLUDES




WS433-M12F-ATE-H8.PNG


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## Ordering Information

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

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4/4