

IoT Weather Station is an all-in-one MobiCom Pro weather monitoring system for various atmospheric conditions, such as temperature, humidity, wind speed, wind direction, barometric pressure and rainfall. Consisting of 3 main parts, WTS Sensors, WTS Hub and solar panel, the IoT Weather Station is designed to withstand the most challenging weather conditions and is easy to install in different scenarios to be widely used in meteorology, smart agriculture, smart building, etc.

Sensor data is transmitted using wireless technology. Compliant with MobiCom Pro gateway and IoT Cloud solution, users can manage all sensor data and trigger other sensors or appliances easily via webpage or mobile App remotely.



Features

Integrated with multiple sensors like humidity, temperature, barometric pressure, wind speed, wind direction, rainfall, etc.

- Waterproof, UV-proof and salt spray resistant enclosure for outdoor harsh environment applications
- ➤ High power solar powered with chargeable batteries backup
- Store locally more than 19,000 historical records and support retransmission to ensure no data is missed
- > Easy to carry and install
- > Ultra-wide-distance wireless transmission up to the line of sight of 15 km in rural areas
- > Equipped with NFC for easy and quick configuration
- Compliant with standard MobiCom Pro gateways and network servers
- Quick and easy management with MobiCom Pro IoT Cloud

Specifications

WTS Sensors

Model	MPC6079
Temperature	
Operating Principle	Thermistor
Range	-40°C - 85°C
Accuracy	± 0.3°C
Resolution	0.1°C
Humidity	
Operating Principle	Capacitive humidity sensor
Range	0% - 100% RH
Accuracy	± 3% RH
Resolution	0.5% RH
Wind Direction	
Operating Principle	Ultrasonic
Range	0° - 360°
Accuracy	± 3°
Resolution	0.1°
Wind Speed	
Operating Principle	Ultrasonic
Range	0 -60 m/s
Accuracy	± 0.3 m/s or ± 3% (whichever is greater)
Resolution	0.1 m/s

Barometric Pressure		
Operating Principle	Piezoresistive absolute pressure sensor	
Range	500 - 1100 hPa	
Accuracy	±0.5 hPa	
Resolution	0.1 hPa	
Rainfall		
Operating Principle	Piezoelectric	
Range	0 - 1000 mm	
Accuracy	±0.5 mm (< 10 mm), ±5 %(>10 mm)	
Resolution	0.01 mm	
Physical Characteristics		
Material	Aluminium Alloy	
Weight	1 kg	
Dimension	ф160 x 263 x ф73 mm	
Operating Temperature	-40°C~ 85°C	
Relative Humidity	0% - 100% (non-condensing)	
Ingress Protection	IP65	
Installation	Pole Mounting	

WTS Hub

Wireless Transmission		
Technology	LoRaWAN®	
Frequency	CN470/RU864/IN865/EU868/US915/AU915/KR920/AS923-1&2&3&4	
Max Tx Power	16dBm (868MHz)/22dBm (915MHz)/19dBm (470MHz)	
Sensitivity	-137dBm @300bps	
Work Mode	OTAA/ABP Class A	
Antenna	Internal Antenna	
Operation		
Power On & Off	Mobile App (via NFC), PC Software (via USB Type-C),	
	Power Button (Internal)	
Configuration	Mobile App (via NFC) or PC software (via USB Type-C)	
Physical Characteristics		
Power Supply	Solar powered (15 W, 1A) with 2 × 2550 mAh chargeable batteries	
	backup	

Operating Temperature	-20°C~60°C
Relative Humidity	0% to 95% (non-condensing)
Ingress Protection	IP67
Dimension	116 × 116 × 45.5 mm (Connectors Excluded)
Installation	Screw Mounting

Solar Panel

Electrical Characteristics		
Open-Circuit Voltage	18 V (± 0.3 V)	
Rated Voltage	15 V (± 0.3 V)	
Rated Current	1 A (± 5%)	
Maximum Power	15 W (± 5%)	
Minimal Power	14.5 W (± 5%)	
Physical Characteristics		
Cell Type	Monocrystalline Silicon	
Operating Temperature	-20°C~80°C	
Weight	1 kg (Without Bracket), 2.2 kg (With Bracket)	
Dimension	343 × 283 × 16.5 mm	



HQ / Sales

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Support

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