

Weather Stations

WB1000 | WS2000 / WS2001 | WB3000 | WB1200

Overview

Our all-in-one and autonomous weather stations get accurate temperature, humidity, solar radiation, pressure, wind direction & speed, and precipitation using the network of over 5000 weather stations around the world to make informed decisions about your business.

Features

Power

Solar, battery or mains we make sure weather stations have more than one power source to operate uninterrupted.

Connectivity

We are here to cover any connectivity requirement, so we can collectively add a weather station at every corner on earth.

WiFi

These PoE injectors are suitable for use on a desktop or in a wall-mount installation and meet your different environments.

Helium / LoRaWAN

Best for remote locations or areas with limited connectivity. Utilises the Helium Network and LoRaWAN technology to ensure long-range and low-power data transmission. Self sufficient in terms of power.

4G-LTE

A versatile choice for areas with 4G connectivity. Ensures fast data transmission and can be easily set up. Suitable for (rural) areas that have no Wi-Fi but have 4G signal coverage. Self sufficient in terms of power.

Easy to Install

Our all-in-one weather stations are the simplest weather solution making them extremely easy to install on a pole and start getting accurate measurements.



Product



Product	M5 (WB1000)	H1/H2 (WS2000/WS2001)	Pulse (WB3000)	D1 (WB1200)
Type	Bundle (Gateway + Station)	Standalone station	Bundle (Gateway + Station)	
Gateway Model	WG1000	Integrated in station (standalone)	WG3000	WG1200
Weather station Model	WS1000	H1 / H2 (WS2000 / WS2001)	WS1001	WS1001
Communication	WiFi	Helium (LoRaWAN)	Cellular	WiFi
Data submission interval	1 minute	3 minutes (adaptive, depends on signal conditions)	>= 10 minutes (adaptive, depends on gateway battery condition)	1 minute
Station sampling interval	16 seconds	12 seconds	20 seconds	20 seconds
GPS	Yes			
Certification	CE / FCC / RoHS			
Box size	44 × 17 × 27 cm	47 × 18 × 37 cm	53 × 19 × 28 cm	44 × 17 × 27 cm
Box weight	2 kg	1.5 kg	2 kg	2 kg

Product



Product	M5 (WB1000)	H1/H2 (WS2000/WS2001)	Pulse (WB3000)	D1 (WB1200)
Box contents	<div>WiFi gateway</div> <div>Weather Station</div> <div>Wind cups</div> <div>Wind vane</div> <div>Metal Plate</div> <div>U-Bolts (x2)</div> <div>Nuts (x4)</div> <div>Wrench</div> <div>Screwdriver</div> <div>Allen key</div> <div>RF Antenna (external)</div> <div>GPS Antenna (external)</div> <div>Reset jumper</div> <div>Power supply cable (USB-C)</div>	<div>Weather Station</div> <div>External battery pack</div> <div>Metal zip ties</div>	<div>Cellular gateway</div> <div>Weather Station</div> <div>Wind cups</div> <div>Wind vane</div> <div>Metal Plate</div> <div>U-Bolts (x2)</div> <div>Nuts (x4)</div> <div>Wrench</div> <div>Screwdriver</div> <div>Allen key</div> <div>Zip-ties</div> <div>Power supply cable (USB-C)</div> <div>External battery pack</div>	<div>WiFi gateway</div> <div>Weather Station</div> <div>Wind cups</div> <div>Wind vane</div> <div>Metal Plate</div> <div>U-Bolts (x2)</div> <div>Nuts (x4)</div> <div>Wrench</div> <div>Screwdriver</div> <div>Allen key</div> <div>Power supply cable (USB-C)</div> <div>External battery pack</div>
Not included	<div>Batteries 1.5V not rechargeable (x2 AA)</div> <div>Metal mounting pole (recommended 50mm/2in pole diameter & at least 2m/6.56ft height)</div> <div>Tools and parts to secure the pole</div> <div>USB power supply</div>	<div>Batteries 1.5V not rechargeable (3-6x AA)</div> <div>Metal mounting pole (recommended 30mm- 40mm/2.36in pole diameter & at least 2m/6.56ft height)</div> <div>Tools and parts to secure the pole</div>	<div>Batteries 1.5V not rechargeable (2-8x AA)</div> <div>Metal mounting pole (recommended 50mm/2in pole diameter & at least 2m/6.56ft height)</div> <div>Tools and parts to secure the pole</div>	<div>Batteries 1.5V not rechargeable (2-8x AA)</div> <div>Metal mounting pole (recommended 50mm/2in pole diameter & at least 2m/6.56ft height)</div> <div>Tools and parts to secure the pole</div> <div>USB power supply</div>

Weather Station
Specifications



Weather Station Specifications	WS1000	WS2000 / WS2001	WS1001
Air Temperature			
Range	-40 ~ +60°C	-40.0 ~ +60.0 °C	-40 ~ +60°C
Accuracy	±1°C	±0.5 °C (0 - 80 °C) ±0.6 °C (-40 - 0 °C)	±1°C
Resolution	0.1°C	0.1 °C	0.1°C
Relative Humidity			
Range	1 - 99% RH	1 - 99% RH	1 - 99% RH
Accuracy	±5%	±3% (1 - 90% RH) ±4% (90 - 99% RH)	±5%
Resolution	1% RH	1% RH	1% RH
Rain Hourly Rate			
Range	0 - 300 mm/h	0 - 450 mm/h	0 - 360 mm/h
Accuracy	±10%	±7%	±10%
Resolution	0.254 mm/h	0.254 mm/h	0.254 mm/h

Weather Station
Specifications



Weather Station Specifications	WS1000	WS2000 / WS2001	WS1001
Wind Speed			
Range	0 ~ 50m/s	0 - 50.0 m/s	0m/s to 40m/s
Accuracy	±1m/s (< 5m/s) ±10% (> 5m/s)	±0.5 m/s (<5 m/s) ±10% (>5 m/s)	<5m/s, ±1m/s; ≥5m/s, ±10%
Resolution	0.1 m/s	0.1 m/s	0.1 m/s
Wind Direction			
Range	0 - 359°	0 - 359°	0 - 359°
Accuracy	± 10°	± 10°	± 10°
Resolution	1°	1°	1°
Illuminance			
Range	0 ~ 200 klux	0 - 200 klux	0 ~ 200 klux
Accuracy	±15%	± 5%	± 15%
Resolution	0.1 klux	0.1 klux	0.1 klux

Weather Station
Specifications



Weather Station Specifications	WS1000	WS2000 / WS2001	WS1001	
UV Index				
Range	0 - 15.0	0 - 15.0	0 - 15.0	0 - 15.0
Accuracy	±2	±2	±2	±2
Resolution	1	1	1	1
Pressure				
Range	300 ~ 1100 hPa	540 - 1100 hPa	540 - 1100 hPa	540 - 1100 hPa
Accuracy	±1hPa	±5 hPa(700 - 1100 hPa) ±8hPa (540 - 699 hPa)	±0.5hPa	±0.5hPa
Resolution	0.1hPa	0.1 hPa	0.1 hPa	0.1 hPa
Communication Frequency	EU 868, US 915	EU868, US915, AU915, AS923_1, AS923_2, AS923_3, AS923_4, AS923_4B, CN470, IN865, RU864 KR920,	EU 868, US 915	
Connectivity	FSK	BLE LoRaWAN	LoRa	
GPS	No: It needs gateway with GPS	Yes	Yes	

Weather Station
Specifications



Weather Station Specifications	M5 (WB1000)	H1/H2 (WS2000/WS2001)	WS1001
Firmware Upgradable	No	Yes (BLE)	No
Payload Encryption	No	LoRaWAN payload encryption	No
Operating Temperature	-20 to +60 °C (Use of alkaline batteries suggested) -40 to +60 °C (Lithium battery)	-20 to +60 °C (Use of alkaline batteries suggested) -40 to +60 °C (Lithium battery)	-20 to +60 °C (Use of alkaline batteries suggested) -40 to +60 °C (Lithium battery)
Operating Humidity	0 - 99% RH	0 - 99% RH	0 - 99% RH
Solar	Yes (for battery support, not charging)		
Power Input	2xAA batteries	3xAA or 6xAA with external battery pack (supplied)	3xAA or 8xAA with external battery pack (supplied)
Battery Life	1-2 years	1 year (solar panel with external battery pack, 20 uplinks / hr)	1-2 years (solar panel with external battery pack)
External Battery Pack	-	Cable length: 2 m IP Rating: IPX6	Cable length: 2 m IP Rating: IPX6
IP Rating	IP44	IP66	IP44

Gateway
Specifications



Gateway Specifications	WG1000	Integrated in station	WG3000	WG1200
Screen	Capacitive touchscreen, 2.0", 320x240	/	OLED 1" 128x64	Capacitive touchscreen, 3.95", 480x480
Connectivity	WiFi (2.4GHz only), BLE, LoRa: Supports both internal and external (supplied) antenna	/	LTE, 2G ,WiFi (2.4GHz only),BLE, LoRa	WiFi (2.4GHz only), BLE, LoRa
GPS	Yes: Supports both internal and external (supplied) antenna	Yes	Yes: GPS/GLONASS/Beidou/Galileo with internal antenna	No: It needs station with GPS
Firmware Upgradable	Yes (OTA)	Yes (BLE)	Yes (OTA)	Yes (OTA)
Data Signing	ATECC608	ATECC608	ARM CC310	ESP32-S3 DS Storage
SIM	/	/	2 SIM slots	/



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Technical Support



Discord Community



Company Website