

Compact Weather Station ACCURATE METEOROLOGICAL INFORMATION

Our trusted weather station module features an advanced combination of sensing methods used to record temperature, humidity, pressure, wind, and precipitation. Through using a specialized instrument within the louvred and aspirated radiation shields, high performance measurements can be recorded over an extended period of time. Through the usage of an ultrasonic sensor device located within the head of the weather station, complex wind measurements can be collected and reported. An embedded electronic compass relays wind direction, and a GPS module provides true wind and many other features. Average speed, direction, World Meteorological Organization datapoints, and average gust information is also provided.

Precipitation data is recorded by an integrated rain gauge, capable of optically measuring the slightest drop of water on it's surface. This ultra-sensitive device analyzes both the size and number of droplets. This data is fed through an algorithm to simulate the output of a tipping bucket rain gauge without the use of any moving parts!



Aspect	Range	Resolution	Accuracy	Units	Sampling Rate
Wind Speed	0.01m/s to 60 m/s	0.01 m/s	3% to 40 m/s	m/s, km/h, mph, kts, ft/min	1Hz
Wind Direction	0 - 359°	1°	3% to 40 m/s	Degrees	1Hz
Temperature	-40 - 70 °C	0.1	0.3C at 20°C	°C,°F, °K	1Hz
Humidity	0 - 100%	1%	2% at 20°C	% Rh, g/m3	1Hz
Dew Point	-40 - 70 °C	0.1	0.3 at 20°C	°C, °F, °K	1Hz
Pressure	300 to 1100 hpa	0.1 hPa	0.5 hPa at 25°C	hPa, mbar, mmHg, inHg	1Hz
Precipitation	0 to > 300 mm/hr	0 to > 300 mm/hr	0.5 hPa at 25°C	mm/hr, mm/total, in/hr, in/total	1Hz

Temp., Humidity, and Pressure

- Air Pressure
 Relative Humidity
- Temperature
 Absolute Humidity
- UV stable radiation shielding
- Protection against moisture / dust

Precipitation Monitoring

- Rainfall totals & Intensity
- Rainfall Y/N
 Emulated Tipping Bucket
 - Integrated Heater
 - 0.08mm tip (different sizes available)

Wind

- Wind Speed and direction
- Apparent and true wind (with GPS use)
- World Meteorological Organization data
- Compass-equipped

GPS

- Height above sea level
- Sunrise / Sunset
- Position of the sun
- Twilight
- Solar noon

Operational conditions

- IP rating of 66
- Temperature range -40 to 70 °C
- RoHS Compliant
- Power supply of 5 to 30 Vdc
- Output rate of1/s, 1/m, 1/hr
- Fully compatible (and recommended) with the Scentroid Scentinal and CTair





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