

EOS1000

Weather Wise.

- Instant, accurate weather data
- Cloud-based interface for desktop and mobile access
- Predictive pest control and spray planning
- Localized frost warning
- Archived historical data via optional EOS Cloud



EOS1000

The EOS-1000 is an advanced all-in-one weather station, which collects and remotely displays environmental data from multiple high precision sensors.

With optional devices, the EOS-1000 can be applied to many sectors, including: agriculture, marine, industrial, or any application where accurate environmental data is required.

In an agricultural application, temperature, humidity, and dewpoint data from EOS-1000 can be used for predictive pest control along with wind data to enable strategic spraying operations. Localized temperature, wind, and solar data can be used to accurately predict frost conditions.

An on-board Linux-based processor stores data which can be viewed online or uploaded to a remote customer database. Optionally, we offer data storage and viewing via our secure EOS Cloud.

All external components are made from the highest quality UV stabilized ABS, high grade aluminum, and stainless steel. The optional LTE cellular interface allows users to collect data from remote locations such as agricultural sites, highways, energy sites (re-usable) or any other site lacking an internet connection.

Built-in sensors monitor the health of EOS-1000 to display battery condition and internal temperature. The unit has a tamper alarm to monitor when the housing has been accessed.

An outdoor webcam can be added for visual reference of weather conditions and other images from the site.

ON BOARD SENSORS

- Relative wind speed and wind direction
- Relative and absolute barometric pressure
- Ambient air temperature
- Humidity
- Calculated dew point, windchill, and humidex
- Rainfall / rain rate
- Luminosity radiation
- UV radiation

OPTIONAL SENSORS

- Wireless and wired soil moisture and temperature
- Snow height
- Water levels
- Camera

FEATURES

- Compact and modular hardware
- High grade stainless steel and ABS plastic hardware
- Easy accessible sensors and local LCD readout
- Tamper alert sensor
- Daily local backup
- NOAA report generation
- Alarm notifications
- AWEKAS and Weather Underground compatible

WIND

Wind Speed Range	0.5-160 km/h (0-100 mph / 0-86 Kn)
Wind Speed Accuracy	+/- 2 km/h (+/- 1 mph / 1 Kn)
Wind Speed Resolution	0.1 km/h
Wind Direction	0-360°
Wind Resolution Direction	1°

TEMPERATURE AND PRESSURE

Temperature Range	-40°C to +80°C (-40°F to +175°F)
Temperature Accuracy	+/- 0.25°C (0.45°F)
Temperature Resolution	0.1°C (0.18°F)
Pressure Range	750-1100 mBar (22.14-32.48 inHg)
Pressure Accuracy	+/- 0.5 mBar (0.014 inHg)
Pressure Resolution	0.1 mBar (0.003 inHg)

HUMIDITY

Range	0 to 100% Rel. Humidity
Accuracy	+/- 3%
Resolution	1% Humidity

RAIN

Accuracy	10%
Resolution	0.2 mm

LIGHT LUMINOSITY

Range	0 to 1200 W/m ²
Accuracy	5%
Resolution	3 W/m ²
Spectral Range	400 nm to 1100 nm

UV

Range	0 to 12 Index
Accuracy	+/- 5%
Resolution	1 Index
Spectral Range	280 nm to 360 nm (UV-A)

SOIL

Range	0 to 50 VWC (Volumetric Water Content)
Accuracy	2%

GENERAL

Dimension	170 x 880 x 140 mm
Weight	3.5 Kg
Power Requirement	220V -110 Vac (Passive) 12V PoE
Backup	12V 7Ah Battery (3 hours)

INTERFACING

Ethernet	Standard
Wifi	Optional
3G	Optional