

EWS Automatic Weather Station



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The AWS includes an EMT satellite logger, a multi-sensor ultrasonic weather sensor, a tipping bucket rain gauge with mounting bracket, and a 3m popup tripod mast. It can provide near real-time weather data from anywhere in the world via the Iridium satellite network.

Features

Satellite Connectivity eliminates the need for logger networks, gateways, and cellular connections.

Monitored Parameters include wind speed, wind direction, relative humidity, temperature, atmospheric pressure, and rainfall. Measurements are typically obtained at 15 minute intervals and transmitted hourly.

Self-Powered: The included EMT logger can operate for extended periods on rechargeable batteries and includes a clip-on solar panel.

Alarm Detection: Alarm threshold values can be set on any input. The EMT logger include a relay that can activate pumps or warning devices when alarms are detected.

Designed for Harsh Environments: EWS loggers operate in temperatures from -40-+80°C and have IP67 rating for water resistance



Sensor Specifications

Wind Speed

Range: 0 to 70m/s (0 to 156 mph) Resolution: 0.1m/s (0.22 mph) Accuracy: ±3%

Wind Direction

Range: 0-359° Resolution: 1° Accuracy: ±3°

Atmospheric Pressure

Range: 300-1100hPa Resolution: 0.1hPa Accuracy:

Humidity

Range: 0-100%RH Resolution: 1% Accuracy: ±1

Temperature

Range: -40 to 80°C (-40 to 176°F)

Resolution: 0.1°C Accuracy: ±0.5°C

Power

Supply: 12V DC Consumption: 1.7W



Tipping Bucket Specifications

Range, Resolution, Accuracy

Range: $0\sim240$ mm/hr (0 to 19 inch/hr) Resolution: 0.2mm or 0.5mm Accuracy: $\pm \le 2\%$ (≤ 240 mm/hr) $\pm \le 3\%$ (≤ 340 mm/hr)

Design

Inner diameter: 200mm/8inch ± 0.3% Acute angle of cutting edge: 45% Discharge control: Straight through flow

Output pulse: Reed switch

Level control: Bulls eye level adhered

Installation & Dimensions

Base: Stainless steel

Mounting holes: Three mountings Height: 402.2mm (16 inch)

Weight: 3.3kg (7.3 lb)