

Solar Series IWOS

COMPLIES WITH ICAO ANNEX 14, VOL. 1, PART 1, SECTION 3.4. & MIL-STD-810G / MIL-STD-461F / FCC PART 15



The Solar Series IWOS (Integrated Weather Observation System) from Aviation Renewables is the compact, wireless, rugged weather station that can be customized to meet your needs. This system can replace legacy automated weather stations or be set up for remote or temporary operations. It integrates over a dozen environmental parameters with built-in data processing and satellite or cellular communications in a package that fits into a single Pelican case and weighs less than 25 lb. With his modular design, the Solar Series IWOS lends itself to higher accuracy, portability, modularity, professional-grade construction and delivers greater availability, and a lower lifecycle cost compared to traditional weather stations.

The environmental sensing modules offer a complete range of weather sensing parameters that include temperature, pressure, humidity, wind speed and direction, lightning distance and frequency, and cloud layers up to 25,000 ft. The modular structure also enables quick replacement and allows room for future growth and advancements. The Solar Series IWOS can deliver environmental conditions in almost real time, as well as transmit data via cellular, wire, radio, or Iridium satellite communications. It is also capable of reporting conditions autonomously for unmanned or re-mote operations. With its modular, portable, and autonomous features, the IWOS is the ideal replacement for automatic weather stations and their peripherals.

solarseries™

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SPECS

Solar Series IWOS (Integrated Weather Observation System)

FEATURE BENEFITS

OFF GRID OPERATION

The Solar Series IWOS provides reliable weather data in remote locations with its secure satellite data stream and off-grid power options.

RUGGED RELIABILITY

The Solar Series IWOS is designed to ensure reliable operation in any weather. It supports continuous, real-time weather reporting for ground and air operations. The rugged construction will endure extended periods of harsh environmental conditions.

RAPID COMMUNICATIONS

Meteorological observations are collected with on-board sensors, processed with on-board computing and transmitted via secure satellite or cellular communications. Reporting intervals can be customized based on customer preference to as rapid as 20 seconds.

COMPACT AND PORTABLE

The Solar Series IWOS is easily transported in a single 25lb case, and is quickly set up by one person in 5 minutes. The advanced instrumentation ensure AWOS-level accuracy from a simple, modular system that requires no calibration in the field.

SPECIFICATIONS

GENERAL

Portable Weather Station Proven solution for weather observation and reporting to improve situational awareness

MECHANICAL

Weight 11.34 kg (25.0 lb)

Dimensions Height 51 cm (20 in.)
Diameter 13 cm (5 in.)

Mounting Hardware 3/8-in 16 threaded tripod mount

Enclosure Colors White / Gray / Brown (Coyote)

ELECTRICAL

Input Options

- RMS120 solar engine
- 24V MAPPS Solar Power System
- Solar Series Hybrid Power System Optional Tactical Battery
- External power (120VAC/230VAC)

Available Accesories Easy integration of other fielded sensors (CBRNE)
Laptop connectivity

COMMUNICATIONS

Integrated Two-Way Satellite Transmitter and Receiver Transmits data to command and control elements via satellite and can receive commands for observing or image requests / Hardwired / RF / Cellular Comms

ENVIRONMENTAL

Operating Temperature -40°C to +60°C (-40°F to +140°F)

Weather Protection IP 67

Cloud Layers Range: 0 to 7620 m (0 to 25,000 ft)

Barometric Pressure Range: 600 to 1110 mb

Humidity Range: 0 to 100%

Precipitation Range: 0 to 152 mm/hr (0 to 6 in/hr)

Wind Speed Range: 0 to 46.3 m/s (0 to 100 knots)

Wind Direction Range: 0° to 359°

Visibility Range: 0 to 40 km (0 to 25 mi)

Lighting Distance Range: 10 m to 75 km

360° Camera Module 4 wide-angle color images with 320 x 240 resolution

WARRANTY

Warranty 1 year

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