

## Solar Series Portable Weather Station - 500



The Solar Series MWS 500 Portable Micro Weather Station is a lightweight, wireless, all-in-one Micro Weather Station designed for commercial applications and businesses that need meteorological data from a single, wireless package. The MWS 500 interprets, processes, and transmits precise meteorological data of 27 environmental parameters at predefined intervals using just its solar power system and rechargeable batteries. This is the only professional-grade sensor that can give complete data-centric picture of weather conditions in a rugged unit that is small enough to fit inside a backpack. The MWS 500 provides site imagery and accurate meteorological data without any wires or external devices, and it can be set up and start reporting in less than 60 seconds.

The Solar Series MWS 500 condenses 12 integrated sensors into a single compact package that is just 7.5 inches tall and weighs only 3.2 pounds. The built-in cellular LTE-M modem enables fully remote operations, and the solar power array and internal rechargeable batteries ensure sustained operations without the need for external power. The MWS 500 also comes standard with 360° panoramic imaging for a total view of the area without having to visit the sensor's site.

### FEATURE BENEFITS

#### OFF GRID OPERATION

The Solar Series MWS 500 enables reliable operations in remote or temporary locations. With no need for external power or generators, the Portable Weather Station is truly autonomous.

#### SAFE & RELIABLE

The MWS 500 is designed with safety in mind. Built to ensure reliable operations in any type of weather, the Solar Series Portable Weather Station supports continuous, real-time weather reporting for ground and air operations, including incident meteorology for wildfire and disaster support with the ability to endure extended periods of harsh environmental conditions and rugged deployments.

#### LOW COSTS

With its unique mix of capabilities, the Solar Series Portable Weather Station provides an enhanced and unparalleled rugged system capability at a significantly reduced cost compared to legacy tactical meteorological systems.

#### COMPACT SIZE

The MWS 500 is easily transportable to any environment. Weighing 3.2 pounds and small enough to fit inside a backpack, the Solar Series Portable Weather Station can be readily deployed by hand or by air into any location for accurate weather sensing and data collection.

# SPECIFICATIONS

## GENERAL

### MWS 500

Proven solution for weather observation and reporting to improve situational awareness

## MECHANICAL

### Weight

1.45 kg (3.2 lb)

### Dimensions

Height 19 cm (7.5 in.)  
Width 14 cm (5.5 in.)  
Diameter 14 cm (5.5 in.)

### Mounting Hardware

1/4-20 threaded camera mount

### Angular Tilt

Range: -90° to +90°

## ELECTRICAL

### Configuration

Integrated DC solar charging system

### Available Accessories

Solar Cell Array by each side

### Battery

Nickel-Cadmium Batteries

### Input Options

Easy integration of other fielded sensors (CBRNE)  
External power (120VAC/230VAC)  
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

## ENVIRONMENTAL

### Operating Temperature

-40°C to +60°C (-40°F to +140°F)

### Weather Protection

IP 67

### 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 26 m/s (0 to 50 knots)

### Wind Direction

Range: 0° to 359°

### Dust Accumulation

Range: 0 to 100% (Quality Control Sensor)

### Lighting Distance

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

## COMPLIANCE

### Compliance

Manufactured under ISO 9001 Quality Management System

## WARRANTY

### Warranty

1 year