

# MWS<sup>®</sup>-C500

## Micro Weather Sensor

The Professional-Grade, All-In-One Weather Sensor with Cellular LTE-M Built for Commercial Applications

### Key Features

- Wireless Weather Sensing in an Elegant, Compact Package
- No Extra Equipment Needed
- Easy 60-Second Installation
- Autonomous Operations
- Two Expansion Ports
- Portable and Rugged

### Weather Data Reported

- Temperature
- Barometric Pressure
- Altimeter Setting
- Relative Humidity
- Wind Speed
- Peak Wind Speed
- Wind Direction
- Visibility
- Dust Accumulation
- Compass Reading
- Precipitation Amount / Type
- Lightning Distance
- Lightning Frequency

### Other Data Reported

- Visual Imagery
- GPS Longitude and Latitude
- GPS Elevation
- Compass Orientation
- Angular Tilt

### Patents

D734,182 | D796,353 | D796,972  
9,784,887 | 10,429,546



The MWS<sup>®</sup>-C500 is the all-in-one weather sensor designed for commercial applications and businesses that need meteorological data from a single, wireless package. This latest innovation in micro weather sensor technology from Intellisense precisely and reliably interprets, processes, and transmits 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 C500 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 C500 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 C500 also comes standard with 360° panoramic imaging for a total view of the area without having to visit the sensor's site.

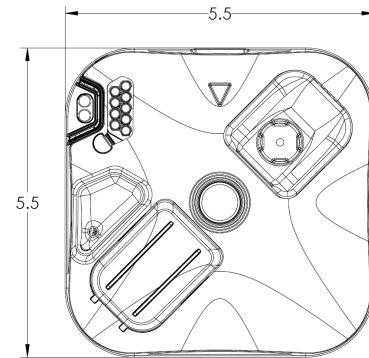
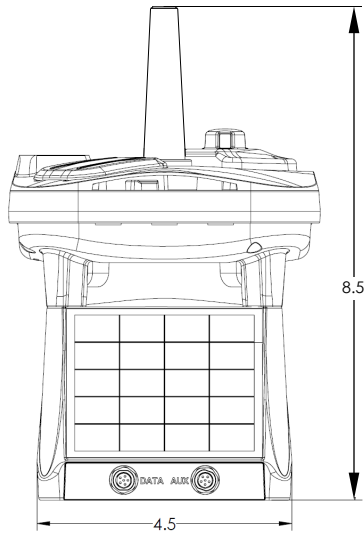


With its wireless, autonomous, and image-capturing capabilities, the C500 delivers a dependable and cost-effective solution to improve businesses' decision-making, efficiency, and operations.



## DIMENSIONS

At just 8.5 inches tall and weighing only 3.2 pounds, the C500 can easily be carried to and set up in just about any location. With a built-in compass and self-reporting GPS, it can be installed or placed in the most remote areas for accurate weather sensing and data collection.



## CONTROLS & CONNECTIVITY

The controls on the C500 are simple. Consisting of a single power switch, the sensor will automatically configure itself for operation within 60 seconds of start-up. The two expansion ports also enable connectivity to laptops, external power sources, and other remote sensors.

## SENSOR SPECIFICATIONS

<b>Temperature</b>	Range: -40 to 60°C (-40 to 140 °F) Resolution: 0.1°C Accuracy: ± 0.2°C at 25°C (77°F)
<b>Barometric Pressure</b>	Range: 600 to 1110 mb Resolution: 0.01 mb Accuracy: ± 0.5 mb at 25°C (900-1100 mb)
<b>Humidity</b>	Range: 0 to 100% Resolution: 1% Accuracy: ± 2%
<b>Precipitation</b>	Range: 0 to 152 mm/hr (0 to 6 in/hr) Resolution: 0.25 mm/hr (.01 in/hr) Accuracy: ± 2.5 mm/hr (0.1 in/hr) or 10% (whichever is greater)
<b>Wind Speed</b>	Range: 0 to 28 m/s (0 to 55 knots) Resolution: 0.5 m/s (1 knot) Accuracy: ± 3%
<b>Wind Direction</b>	Range: 0° to 359° Resolution: 1° Accuracy: ± 5°
<b>Angular Tilt</b>	Range: -90° to +90° Resolution: 0.1° Accuracy: ± 1°
<b>Dust Accumulation</b>	Range: 0 to 100% (Quality Control Sensor) Resolution: 1% Accuracy: ± 10%
<b>Lightning Distance</b>	Range: 0 to 40 km (0 to 25 mi) Resolution: 3.2 km (2 mi) Accuracy: Varies
<b>Visibility</b>	Range: 10 to 10,000 m (0 to 6.2 mi) Resolution: 100 m (0.06 mi) Accuracy: ±10%
<b>360° Imaging Sensor</b>	4 wide-angle color images with 320 x 240 resolution

## ACCESSORIES

To serve a variety of needs, Intellisense offers many accessories for the C500, including mounting solutions, carrying cases, and extension cables up to 500 feet in length.

For a complete catalog of weather sensor accessories, please visit [intellisenseinc.com](http://intellisenseinc.com).

## UNIT PROPERTIES

<b>Weight</b>	1.45 kg (3.2 lb)
<b>Dimensions</b>	H: 21 cm (8.5 in) W: 14 cm (5.5 in) D: 14 cm (5.5 in)
<b>Operating Temperature</b>	Minimum: -40°C (-40°F) Maximum: +60°C (+140°F)
<b>Mounting Hardware</b>	1/4-20 threaded camera mount
<b>Power Management</b>	<b>Solar Cell Array and Onboard Nickel-Cadmium Batteries</b> Continuous operation and the ability to endure extended periods of harsh environmental conditions
<b>Communications</b>	<b>Integrated LTE-M Cellular Modem</b> Transmits data to command and control elements via satellite and can receive commands for observing or image requests
<b>Expansion Port</b>	<b>Threaded M8 Serial Connector Rated to IP67 Waterproof Standards</b> Allows new capabilities to be added and easy integration of other fielded sensors, including external power and laptop connectivity as well as easy integration of other field sensors
<b>Compliance</b>	Manufactured under ISO 9001 Quality Management System

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