

Modular Weather Stations



WMS-25 Series



- ✓ Desktop, NEMA, and Portable Models
- ✓ 8 Analog and 3 Digital Channel Inputs
- ✓ Resolution: 12-Bit A/D Converter on 4 Channels, 10-Bit on Other Channels
- ✓ Adjustable Logging Interval 10 to 60,000 Seconds
- ✓ 16 Character x 2 Line Backlit LCD Screen Display
- ✓ Real-Time Clock is Used to Time-Stamp each Measurement, Battery Backed, and Accurate to Within 10 Minutes Per Year
- ✓ Serial Port: RS232 9-Pin Connector, Selectable Baud Rate, Real-Time Data Output to PC (Using Hyperterminal or Optional Graphic Software)
- ✓ 512MB SD Memory Card and USB Card Reader Included



WMS-25 shown smaller than actual size.

The WMS-25 Modular Weather Stations are meteorological systems designed to be a "user friendly" solution for data storage and real-time monitoring of weather conditions.

The standard sensor package includes 6 weather parameters: wind speed and direction, temperature and relative humidity, barometric pressure, and precipitation (additional optional sensors can be added), a 1.5 m (5') tripod and vertical mast for sensor mounting, and a data logger with LCD display.

No computer is required for setup and viewing data. A simple menu interface using the LCD display and three front panel buttons makes setup easy. Data is recorded directly to a Secure Digital (SD™) card, providing convenient data downloads and storage for many months of data. The data logger is compatible with standard SD cards up to 2GB. Logging at 1 minute intervals, a 2GB card will store over 5 years of data. A new file is created and saved to the card each day.

Using the recorded data is simple. The SD card is inserted into a card reader attached to the USB port on your computer (Windows, Macintosh, and Linux) and will then show up as a drive. To view and graph the data, click on the file corresponding to the day of interest. Microsoft Excel, OpenOffice.org, or any spreadsheet program can be used to view, graph, and analyze your data.



View graph, and analyze your recorded data. Laptop not included.



Specifications

Power: 10 to 30 Vdc at 20 mA
Display: 16 characters x 2 line backlit LCD
Logging Interval: Programmable 10 to 60,000 seconds
Wind Speed
Range: 0 to 125 mph (0 to 57 m/s)
Resolution: > 0.1 mph
Accuracy: ± 1 mph
Starting Threshold: 0.8 mph
Time Constant: 2 seconds
Wind Direction
Range: 0 to 360°
Resolution: > 1°C

Accuracy: ±3°
Starting Threshold: Standard 1.2 mph
Temperature
Range: -40 to 60°C (-40 to 140°F)
Resolution: > 0.1° F
Accuracy: ±0.5°C (±1°F) typical
Response Time: 50 seconds
Relative Humidity
Range: 3% to 100% non-condensing
Accuracy: ±3% typical
Response Time: 25 seconds
Barometric Pressure
Range: 500 to 1100 mb typical (14.7 to 32.5 inHg)

Operating Temperature: -40 to 60°C (-40 to 140°F)
Resolution: ±0.3 mb or ±0.01 inHg
Altitude Offset (For Sea Level Correction): User adjustable in logger
Rain Gauge
Resolution: 0.01"/tip
 8" diameter (20.5 cm) collector meets NWS specifications
Switch: Dry reed switch
Output: < 0.1 sec switch closure
Accuracy: ±2% at < 2" per hour
Note: For weight and dimensions, see operator's manual at OMEGA.

To Order		
Model No.	Description	Included Models
WMS-25	Weather station with indoor enclosure, with temperature and humidity	WMS-25-DL, WMS-25-WSD, WMS-25-BP, WMS-25-TH, WMS-25-RG and WMS-25-TP5
WMS-25-NEMA	Weather station with NEMA-4X enclosure, with temperature and humidity	WMS-25-NEMA-DL, WMS-25-WSD, WMS-25-BP, WMS-25-TH, WMS-25-RG and WMS-25-TP5
WMS-25-P	Portable weather station, with temperature	WMS-25-P-DL, WMS-25-WSD, WMS-25-AT and WMS-25-TP3
WMS-25-PRH	Portable weather station, with temperature and humidity	WMS-25-P-DL, WMS-25-WSD, WMS-25-TH and WMS-25-TP3
Accessories		
WMS-25-SP	Solar panel, 10 watt with regulator	(use with WMS-25-NEMA)
WMS-25-SR	Solar radiation sensor	
WMS-25-GS	Graphical display software	
WMS-25-BP	Barometric pressure sensor	(use with WMS-25P, WMS-25-PRH)
WMS-25-SRG	Small rain gauge, 0.02" tip, 7.6 m (25') cable	(use with WMS-25-P, WMS-25-PRH)
WMS-25-TWS	Soil/water temperature sensor	
Replacement Parts		
WMS-25-P-DL	Data logger only, in carrying case	
WMS-25-DL	Data logger in desktop enclosure	
WMS-25-NEMA-DL	Data logger in NEMA 4X (IP67) enclosure	
WMS-25-RG	8" rain gauge, 0.01" tip, 18.2 m (60') cable	
WMS-25-AT	Air temperature sensor, 12.2 m (40') cable	
WMS-25-TH	Temperature/humidity sensor with radiation shield, 12.2 m (40') cable	
WMS-25-RS	Radiation shield	
WMS-25-TP5	1.5 m (5') tripod with 1.5 m (5') mast	
WMS-25-TP3	0.91 m (3') tripod with 1.8 m (6') mast	
WMS-25-WSD	Wind speed and direction sensor	
WMS-25-MC	Spare 512MB memory card	
WMS-25-MCR	Memory card reader	

Comes complete with 512MB SD card, USB card reader and operator's manual.

Ordering Example: WMS-25-P, portable weather station with WMS-25-MC, spare 512MB memory card.

NOTE: Loggers are programmed to display English units. Please contact Sales for Metric units availability.