



METER



ATMOS 41W

Wireless All-In-One Weather Station

THE TRUTH ABOUT WIRELESS

Most all-in-one remote weather stations claim to be wireless but actually include a wire that connects to telemetry in a bulky enclosure. Add to that a big solar panel and a giant battery, and things start to get costly. We think getting your data shouldn't be complicated—or costly. And we think wireless should actually be wireless. That's why we created the ATMOS 41W.

MEET THE WORLD'S SIMPLEST WIRELESS WEATHER STATION

The ATMOS 41W all-in-one remote weather station is one of the world's few truly wireless weather stations, and it's the most affordable research-grade station in its class. It's robust, reliable, and simple to use. All of the telemetry is enclosed with an integrated cell or Wi-Fi module. But that's not even the best part. There is nothing on the market that is easier to install. Put it in a backpack, take it to your site, secure it to a post pointing North, and walk away. It's that easy to start broadcasting real-time data directly to the cloud.

FEATURES

- A true wireless weather station ideal for short-term or long-term installations
- Incredible 10-minute installation
- All sensors, solar panels, and cellular or Wi-Fi communications integrated into a single, small form factor
- See, share, and manage data remotely with ZENTRA Cloud
- Robust design that prevents errors because of wear or fouling
- Integrated sensor leveling mechanism
- Increased wind speed measurement up to 60 m/s
- Dual precipitation measurements provide high accuracy at both low and high precipitation levels

SPECS

Solar Radiation	Range: 0–1,750 W/m ² Resolution: 1 W/m ² Accuracy: ±5% of measurement typical
Relative Humidity (RH)	Range: 0–100% RH (0.00–1.00) Resolution: 0.1% RH Accuracy: Sensor measurement accuracy is variable across a range of RH. See chart.
Air Temperature	Range: –63 to 60 °C Resolution: 0.1 °C Sensor Accuracy: ±0.2 °C at 25 °C Measurement Accuracy: ±0.6 °C from –20 to 50 °C For more information see Section 3.2.6 of the <i>ATMOS 41W User Manual</i>
Humidity Sensor Temperature	Range: –63 to 80 °C Resolution: 0.10 °C Accuracy: ±0.2 °C
Vapor Pressure	Range: 0–47 kPa Resolution: 0.01 kPa Accuracy: Sensor measurement accuracy is variable across a range of temperature and RH. See chart.
Barometric Pressure	Range: 1–120 kPa Resolution: 0.01 kPa Accuracy: ±0.05 kPa at 25 °C ±0.1 kPa from –10 to 50 °C ±0.5 kPa below –10 °C and above 60 °C
Horizontal Wind Speed	Range: 0–30 m/s Resolution: 0.01 m/s Accuracy: The greater of 0.3 m/s or 3% of measurement
Wind Gust	Range: 0–30 m/s Resolution: 0.01 m/s Accuracy: The greater of 0.3 m/s or 3% of measurement
Wind Direction	Range: 0°–359.9° Resolution: 0.1° Accuracy: ±5°
Tilt	Range: 0° to 180° Resolution: 0.1° Accuracy: ±1°
Precipitation	Range: 0–1,500 mm/h Resolution: 0.017 mm Accuracy: ±5% of measurement from 0 to 1,000 mm/h
Electrical Conductivity	Range: 0–3 mS/cm Resolution: 0.001 mS/cm Accuracy: The greater of 0.005 mS/cm or 15% of measurement
Operating Temperature Range	Minimum: –40 °C Typical: NA Maximum: 60 °C NOTE: Barometric pressure and relative humidity sensors operate accurately at a minimum of –40 °C. Alkaline batteries should be used if temperatures below –40 °C are expected.

USA

2365 NE Hopkins Court, Pullman WA 99163

T 509.332.5984 F 509.332.5158

E sales.environment@metergroup.com W metergroup.com

Europe

Mettlacher Straße 8, 81379 München

T +49 89 1266520

E info.europe@metergroup.com W metergroup.com