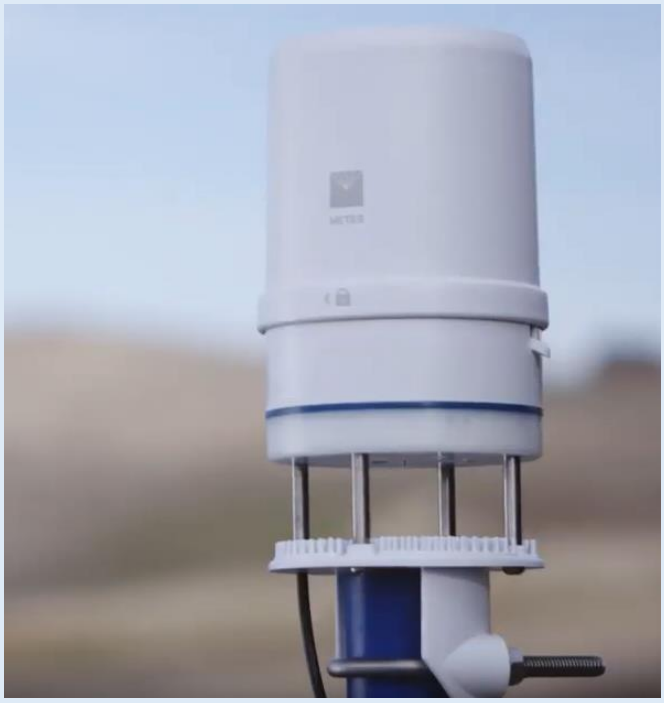
METER
ENVIRONMENT

ATMOS 41 All-in-one weather station



The all-new ATMOS 41 is the first affordable all-in-one weather station that fulfills all your weather monitoring needs but doesn't restrain you when you want to do more.

The ATMOS 41 packages 12 weather sensors into a single, compact device for atmospheric conditions. It was designed for continuous deployment in harsh climates, such as Africa, which means there are no moving parts to fail. Installation and maintenance have been simplified to the maximum because there's never any mechanical wear. No oiling or replacing bearings. Just reliability you can continue to count on. ATMOS 41 is a simple, compact, and connected device with the flexibility to do more than weather measurements.

- Measures 12 weather variables including: air temperature, relative humidity, vapor pressure, barometric pressure, wind speed, gust and direction, solar radiation, precipitation, lightning strike counter and distance
- Easy installation
- No moving parts
- All data transmitted over a single wire
- Digital SDI-12 communication
- Connect to ZL6 for data capture and management
- Designed for continuous deployment in harsh climates
- No louvered radiation shield to attract bugs
- Detects fine-scale wind speed variations with 0.01 m/s resolution
- Integrated accelerometer detects if sensor is off-level
- Integrated spring acts as a rain gauge filter to keep out large particles but still allow enough water flow
- Optional bird deterrent fits perfectly on the funnel

SPECIFICATIONS

Solar radiation	Range: 0 to 1750 W/m^2 Resolution: 1 W/m^2 Accuracy: ± 5% of measurement typical
Precipitation	Range: 0 to 400 mm/h Resolution: 0.017 mm Accuracy: ± 5% of measurement from 0 to 50 mm/h
Relative Humidity	Range: 0 to 100% RH Resolution: 0.1% RH Accuracy: varies with temperature and humidity, ±3% RH typical.
Air temperature	Range: -50 to 60 °C Resolution: 0.1 °C Accuracy: ± 0.6 °C
Barometric pressure	Range: 50 to 110 kPa Resolution: 0.01 kPa Accuracy: +/- 0.1 kPa from -10 °C to 50 °C, +/- 0.5 kPa from -40 °C to 60 °C
Vapor Pressure	Range: 0 to 47 kPa Resolution: 0.01 kPa Accuracy: varies with temperature and humidity, ±0.2 kPa typical below 40 °C.
Horizontal wind speed	Range: 0 to 30 m/s Resolution: 0.01 m/s Accuracy: the greater of 0.3 m/s or 3% of measurement
Wind gust	Range: 0 to 30 m/s Resolution: 0.01 m/s Accuracy: the greater of 0.3 m/s or 3% of measurement
Wind direction	Range: 0 to 359° Resolution: 1° Accuracy: ± 5°
Tilt	Range: -90° to +90° Resolution: 0.1° Accuracy: ± 1°
Lightning strike count	Range: 0 to 65,535 strikes Resolution: 1 strike Accuracy: variable with distance, >25% detection at <10km typical
Lightning average distance	Range: 0 to 40 km Resolution: 3 km Accuracy: variable

PHYSICAL CHARACTERISTICS	
Dimensions	10 cm diameter x 34 cm height (includes rain gauge filter)
Cable length	5 m (standard) 75 m (maximum custom cable length for additional cost) **NOTE: Contact Customer Support if a nonstandard cable length is needed.**
Data logger compatibility (not exclusive)	METER data loggers (ZL6, EM60 series), Campbell Scientific
ELECTRICAL AND TIMING CHARACTERISTICS	
Supply voltage (VCC to GND)	Minimum: 3.6 VDC continuous Maximum: 15.0 VDC continuous **NOTE: The ATMOS 41 must be continuously powered in order to work properly** **NOTE: For the ATMOS 41 to meet SDI-12 specified digital logic levels, it must be excited at 3.9 VDC or greater.**
Measurement duration	Typical: 110 ms Maximum: 3,000 ms
Compliance	Manufactured under ISO 9001:2015 EM ISO/IEC 17050:2010 (CE Mark)
Pyranometer spectral response	Spectral response estimate of Apogee silicon-cell pyranometers. Spectral response was estimated by multiplying the spectral response of the photodiode, diffuser, and adhesive. Spectral response measurements of diffuser and adhesive were made with a spectrometer, and spectral response data for the photodiode were obtained from the manufacturer.

מטאו-טק שירותים מטאורולוגיים בע"מ

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