

All-in-one weather station



Plus One, Or Two, Or Three...

ATMOS 41

The problem with weather stations.

Most weather stations are cluttered, complicated and frustrating to install and maintain. Wiring and programming all the components can be a nightmare and finding room to mount everything can be a challenge.

All-in-one weather stations solve many of these problems, but the tradeoff is flexibility. Adding just one more sensor often requires an extra data logger, making the system more complicated and more expensive.

All-in-one plus one.

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

The details.

The ATMOS 41 packages 12 weather sensors into a single, compact device. There are no moving parts to fail. So, installation and maintenance have been simplified to the maximum.

Most all-in-one weather stations give you the option to measure solar radiation OR precipitation, but not both.

ATMOS 41 provides both measurements in one device, so you never have to compromise.

ATMOS 41 data are transmitted over a single wire. That means you don't have to use all of the ports on your data logger just for weather measurements.

Weather stations, reimagined.

ATMOS 41 is a simple, compact, and connected device with the flexibility to do more than weather measurements. That is why we call it an all-in-one plus one, or two, or three...

Features

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

Specifications

Solar radiation	Range: 0 to 1750 W/m ² Resolution: 1 W/m ² Accuracy: ± 5%
Precipitation	Range: 0 to 125 mm/hr Resolution: 0.017 mm Accuracy: ± 5% of measurement from 0 to 50 mm/hr
Air temperature	Range: -40 to 50° C Resolution: 0.1° C Accuracy: ± 0.6° C
Humidity sensor temperature	Range: -40 to 50° C Resolution: 0.1° C Accuracy: ± 1.0° C
Relative humidity	Range: 0 to 100% Resolution: 0.1% Accuracy: 3% typical, varies with temperature and humidity

Vapor pressure	Range: 0 to 47 kPa Resolution: 0.01 kPa Accuracy: ± 0.2 kPa typical below 40° C, varies with temperature and humidity
Barometric pressure	Range: 50 to 110 kPa Resolution: 0.0015 kPa Accuracy: ± 0.1 kPa
Wind speed	Range: 0 to 60 m/s Resolution: 0.01 m/s Accuracy: the greater of 0.3 m/s or 3% of measurement
Wind gust	Range: 0 to 60 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: $\pm 5^\circ$
Compass heading	Range: 0 to 359° Resolution: 1° Accuracy: $\pm 5^\circ$
Sensor tilt	Range: 0 to 180° Resolution: 0.1° Accuracy: $\pm 1^\circ$
Lightning strike counter	Range: 0 to 65535 Resolution: 1 strike Accuracy: varies with distance, > 25% detection at <10 km typical
Lightning distance	Range: 0 to 40 km Resolution: 3 km Accuracy: unspecified