

# ALL-IN-ONE WEATHER STATION

Plus One, Or Two, Or Three...

pacific data systems  
Solutions. Technology. Simple.



## FEATURES

- Measures 12 weather variables including: air temperature, relative humidity, vapor pressure, barometric pressure, wind speed and direction, solar radiation, precipitation, lightning
- Easy installation
- No moving parts
- All data transmitted over a single wire
- Digital SDI-12 communication

## 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, giving you the flexibility to add any other required sensors, e.g. soil moisture, UV.

The ATMOS 41 works seamlessly as a simple, plug-and-play option for data logging and cloud-based data storage and management. You can set up an entire weather monitoring system without any complex wiring or programming.

### 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...

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**SOLAR RADIATION** ☀️  
**LIGHTNING** ⚡



**PRECIPITATION** ☁️



**HUMIDITY** 💧  
**TEMPERATURE** 🌡️  
**BAROMETRIC PRESSURE** 🌀



**WIND SPEED AND DIRECTION** 🌬️

## Specifications

Specifications	Range	Resolution	Accuracy
Solar radiation	0 to 1750 W/m2	1 W/m2	± 5%
Precipitation	0 to 125 mm/hr	0.017 mm	± 5% of measurement from 0 to 50 mm/hr
Air temperature	-40 to 50° C	0.1° C	± 0.6° C
Humidity sensor temp.	-40 to 50° C	0.1° C	± 1.0° C
Relative humidity	0 to 100%	0.1%	3% typical, varies with temp.and humidity
Vapor pressure	0 to 47 kPa	0.01 kPa	± 0.2 kPa typical below 40° C, varies with temp.and humidity
Barometric pressure	50 to 110 kPa	0.0015 kPa	± 0.1 kPa
Wind speed	0 to 30 m/s	0.01 m/s	the greater of 0.3 m/s or 3% of measurement
Wind gust	0 to 30 m/s	0.01 m/s	the greater of 0.3 m/s or 3% of measurement
Wind direction	0 to 359°	1°	± 5°
Compass heading	0 to 359°	1°	± 5°
Sensor tilt	0 to 180°	0.1°	± 1°
Lightning strike counter	0 to 65535	1 strike	varies with distance, > 25% detection at <10 km typical
Lightning distance	0 to 40 km	3 km	unspecified