



# ATMOS-14 SENSOR TEMPERATURE/ RELEIVE HUMIDITY/ BAROMETRIC PRESSURE/ VAPOR PRESSURE

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### **Microclimate measurement made simple:**

If you're doing a microclimate or evapotranspiration study, you may need up to four extra sensors to get important measurements that will benchmark your data. Not to mention you have to face the hassle of getting all those sensors integrated into your system. What you need is something simpler. With this in mind, we engineered the ATMOS-14 to be four sensors in one—air temperature, relative humidity, barometric pressure, and vapor pressure. And best of all, it's plug and play with our data logger.

### **Plug it in, and walk away:**

Despite its minimalist design, the ATMOS-14 provides maximum value. While other sensors require wiring and programming, the ATMOS-14 simply plugs into the (It's also compatible with third-party data loggers). There's no having to figure out complicated instructions. Just mount the sensor on your data logger mast, plug it in, and walk away.

### **Measures a lot. Requires very little effort:**

The ATMOS-14 is low-maintenance. It gives accurate vapor pressure and RH without a lot of cleaning. Plus it's weatherproof, meaning it will last a long time in the field. Another helpful feature is the compact shape that fits into tight spaces, leaving room on a mast for other sensors.

### **Readings don't get any more rapid:**

Because the ATMOS-14 is plug and play, setup is quick. And responses are equally fast. Thanks to a Teflon protection screen that keeps liquid water out, but vapor moving freely through, it responds rapidly while keeping dust and liquid water off the sensor. Both features add up to time saved on your part.

### **For everything it measures, there's not much to it:**

With ATMOS-14, all your basic microclimate measurements are covered using a small, simple integrated sensor. This versatile, low-maintenance sensor will rapidly and reliably measure air temperature, relative humidity, barometric pressure, and vapor pressure, making benchmarking quick and hassle-free.

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## ATMOS-14

## Technical Specifications

RELATIVE HUMIDITY (RH)	
Range	0 to 100% RH
Resolution	0.1% RH
Accuracy	Sensor measurement accuracy is variable across a range of RH. $\pm 2\%$ between 20°-40°C
Long-term drift	< 0.5% RH/year, typical
TEMPERATURE	
Range	-40 to 80°C
Resolution	0.1°C
Accuracy	Sensor measurement accuracy is variable across a range of temperatures. $\pm 0.3^\circ$ between 20°-40°C
Long-term drift	< 0.04 °C/year typical
VAPOR PRESSURE	
Range	0 to 47 kPa
Resolution	0.01 kPa
Accuracy	Sensor measurement accuracy is variable across a range of temperatures and RH. Approx. $\pm 0.1$ kPa
BAROMETRIC PRESSURE	
Range	50 to 110 kPa
Resolution	0.01 kPa
Accuracy	$\pm 0.4$ kPa
COMMUNICATION SPECIFICATIONS	
Output	DDI serial or SDI-12 communications protocol
Data logger compatibility	METER data loggers (ZL6, EM50/60 series) or any data acquisition system capable of 3.6- to 15-VDC power and serial or SDI-12 communication.
PHYSICAL SPECIFICATIONS	
Dimensions	Diameter: 2.0 cm    Height: 5.4 cm
Operating temperature range	Minimum: -40 °C    Maximum: +80 °C NOTE: Sensors may be used at higher temperatures under certain conditions; contact Customer Support for assistance.