ATMOS 14: SENSOR TEMP/RH/BAROMETRIC PRESSURE/VAPOR PRESSURE

DESCRIPTION

The ATMOS 14 is a versatile, low-maintenance, and fast sensor designed to make taking temp/RH measurements simpler and therefore less work.

ATMOS 14 provides maximum value. While other sensors require wiring and programming, the ATMOS 14 simply plugs into the ZL6 (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.

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.

ATMOS 14

FEATURES

- Four measurements in one sensor
- Plug and play capability
- Collect data remotely when used with the ZL6 data logger
- Compact
- Teflon screen protects the sensor from weather
- Fast response
- Integrated temperature for accuracy

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.

Contact info

Monitoring MENA

Insight into instrumentations

(962) 5353-2091

PO Box 1100 Salt

Post Code 19110 **JORDAN**

sales@monitoring-mena.com

www.monitoring-mena.com

ATMOS 14

SPECIFICATIONS

RELATIVE HUMIDITY (RH)	
Range	0 to 100% RH (0.00-1.00)
Resolution	0.1% RH
Accuracy	Sensor measurement accuracy is variable across a range of RH
Equilibration time (τ, 63%)	<40 s (response time in 1 m/s air stream)
Hysteresis	< 1% RH, typical
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
Equilibration time (τ, 63%)	< 400 s (response time in 1 m/s air stream)
Long-term drift	< 0.04 °C/year typical
VAPOR PRESSURE	
Range	0 to 47 kPa
Resolution	0.001 kPa
Accuracy	Sensor measurement accuracy is variable across a range of temperatures and RH
BAROMETRIC PRESSURE	
Range	50 to 110 kPa
Resolution	0.01 kPa
Accuracy	±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 (0.8 in). Height: 5.4 cm (2.1 in)
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.**
Cable length	5 m (standard). 75 m (maximum custom cable length) **NOTE: Contact Customer Support if a nonstandard cable length is needed.**
Connector types	3.5-mm stereo plug connector or stripped and tinned wires
ELECTRICAL AND TIMING CHARACTERISTICS	
Supply voltage (VCC to GND)	Minimum: 3.6 VDC. Maximum: 15.0 VDC
Digital input voltage (logic high)	Minimum 2.8 V. Typical: 3.0 V. Maximum: 5.5 V
Digital input voltage (logic low)	Minimum: –0.3 V. Typical: 0.0 V. Maximum: 0.8 V
Digital output voltage (logic high)	Typical: 3.6 V
Power line slew rate	Minimum: 1.0 V/ms
Current drain (during measurement)	Minimum: 4.50 mA. Typical: 4.75 mA. Maximum: 5.00 mA
Current drain (while asleep)	Typical: 0.03 mA
Power up time (DDI serial)	Maximum: 100 ms
Power up time (SDI-12)	Minimum: 100 ms. Typical: 1,100 ms. Maximum: 1,100 ms
Measurement duration	Typical: 550 ms. Maximum: 600 ms
COMPLIANCE	Manufactured under ISO 9001:2015. 2004/108/EC and 2011/65/EU. EN61326-1:2013. EN50581:2012

This Instrument is manufactured by our principle company

METER Environment - USA