

Titan Omni Sensor

Temperature and Humidity



Applications

The advanced electronics and instrumentation on board the Omni-Sensor make it suitable for a wide range of applications, including greenhouses, growth chambers, produce coolers and other clean ambient air sampling environments. Use wherever combined temperature and humidity measurements are required.

Note: Aspirated sensors are not suitable for environments containing fogs or very fine water mists. Fans and other electronic parts will be damaged from prolonged exposure to free water. In addition, moisture will accumulate in the air path affecting both humidity and temperature readings through local evaporation and evaporative cooling until the unit is completely dry again.

Alternative

Argus offers a wide selection of application-specific sensors and sensor enclosures for use with the Titan system. Other models of the Omni-Sensor include one for temperature-only monitoring (**SEN-OSM/T**) as well as a comprehensive unit that combines temperature, humidity, PAR light and optional CO2 monitoring, complete with an LCD digital readout and operator input buttons (**SEN-OSM/C & SEN-OSM/CO2**).

Titan Omni-Sensor is an aspirated module for in-zone temperature and humidity monitoring. v3.0 Omni-Sensors are backwards compatible with v1 and v2 models.

Features

- Connects to a Titan I/O Module using **simple, two-conductor cable**. This also provides an easy means of suspension for the sensor. Digital communications enable **long wiring runs up to 4000 feet**. Custom cable lengths can be specified.
- **Requires only a single digital input on the I/O Module** leaving all analog inputs free for other uses. Up to two Omni-Sensors can be connected to one I/O Module.
- **High accuracy** temperature and humidity measurements.
- **Compact, versatile construction.** The box cover can be rotated 180 degrees, so that the cable enters via the bottom of the unit. This accommodates wall or post mounting using an included mounting bracket.
- **Loop powered** via the connected I/O Module.
- **Quick-connect waterproof connector** for easy module swaps.



Specifications

Dimension:

4.9" H x 3.3" W x 2.1" D

Power Requirements:

Power is provided by the connected I/O Module via the 2-wire connection.

Cabling:

Factory cable is provided separately. Standard lengths are 15', 30', and 60'. Custom lengths are also available. Cables can also be extended using 2-conductor non-shielded 18-24 AWG UV-resistant cable. A blue Omni-Sensor Input Protection Board is provided with each sensor and must be installed on the I/O Module input as shown. Wiring details are provided with each unit.

Specifications

Temperature Sensors:

- 2 solid-state digital sensors.
- **Accuracy:** <85%RH ± 0.2°C; >85%RH ± 0.3°C.
- **Range:** -10 to + 40 °C.

Humidity Sensors:

- **Range:** 10-100% non-condensing
- **Accuracy:** 10 - 20 %RH: +/- 4%; 20 - 85 %RH: +/- 1.8 %; >85 %RH: +/- 4 %

Operating Temperature:

-40 °C to +60 °C

Wiring Details

Typical wiring example. For installation, refer to the supplied wiring diagrams and instructions.

The supplied Input Protection Board (Omni IPB) provides power for the Omni-Sensor and protection for the I/O Module.

