

## Protege Temperature and Humidity Sensor

The PRT-ATH1/ACC-ATH1 Protege Temperature and Humidity Sensor is designed to measure temperature and humidity and to operate in a Standalone mode or connected to the Protege System. It has an internal temperature and humidity sensor as well as the circuitry for an external k-type thermocouple temperature sensor.



### Feature Highlights

- > Temperature sensor -40°C to 60°C ( $\pm 1^\circ\text{C}$ )  
-40°F to 140.0°F ( $\pm 2^\circ\text{F}$ )
- > Humidity Sensor -% to 100% ( $\pm 3\%$ )
- > Secure encrypted RS-485 module communications
- > Channel deviation trigger level
- > 2 low current programmable outputs
- > 2 LED display programmable outputs
- > 8 to 30VDC input power supply
- > Online and remote upgradable firmware

### Digital Outputs

The Temperature and Humidity Sensor contains two user configurable relay outputs which can be used for direct control of external equipment. It also contains two user configurable LED outputs which can be set up to display various operating conditions.

### Analog Outputs

The ACC-ATH1 Protege Temperature and Humidity Sensor is identical to the PRT-ATH1 Protege Temperature and Humidity Sensor with the exception that it includes two 0 to 10V or 4 to 20mA independently configurable analog outputs. These outputs can be wired into a PLC or used for analog control of other equipment.

### Standalone

The Protege Temperature and Humidity Sensor can be used in a standalone mode if the full capabilities of the Protege system are not required. In standalone mode the module can be programmed through dip switch settings or through a terminal emulator program. With the exception of reporting and data logging, all capabilities of the module are available in standalone mode.

## Technical Specifications

Operating Voltage	12VDC (8 to 30VDC)
Operating Current	20mA (Typical)
Internal Temperature Range	-40°C to 60°C (±1°C) (-40°F to 140.0°F (±2°F))
External Temperature Range (Thermocouple)	-40°C to 60°C (±1°C) (-40°F to 140.0°F (±2°F))
Humidity Range	0% to 100% (±3%)
Communication	Non-isolated
Zone Inputs	8 Trouble Zones
PGM Outputs	2 Relay Outputs (100mA max) 2 Configurable LED Outputs
PGM Outputs (ACC-ATH1 only)	2 4-20mA or 0-10V Analog Outputs
Operating Temperature	5° to 55°C (41° to 131°F)
Storage Temperature	-10° to 85°C (14° to 185°F)
Humidity	0% to 85% (non condensing)
Dimensions (H x W x D)	118 x 75 x 19mm (4.7 x 3 x 0.75")
Weight	118g (4.16oz)

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