
EA1640

Temperature & Humidity Sensor



EA1640 serves as a compact, flexible humidity and temperature measuring solution for ATEN PG series PDU applications where precision is significant – from server rooms, data centers, hospitals, smart factories to green offices. The sensor contains 1 x RJ-45 input port, 1 x RJ-45 output port, and 1x RJ-11 input port for easy connection with PG PDU series and environmental sensors including [EA1140](#), [EA1240](#), and [EA1340](#). One terminal block is built for combining [EA1440](#) / [EA1441](#) / [EA1442](#) door sensor or [EA1540](#) the capacitive leakage sensor. Up to 8 daisy-chained devices are supported to broaden applications.

Designed with the ultimate flexibility in mind, EA1640 can be placed at an ideal location as a result of the 1.5 m RJ-45 cable coming with it. In addition, it comes with a magnet for easy attachment to metallic surfaces. Rack mount kits are also included for quick installation inside racks.

Features

- A humidity and temperature measuring solution for ATEN PG PDU series
- Precise relative humidity accuracy: $\pm 7.5\%$ RH, 30 – 70 % RH; $\pm 15\%$ RH, 15 – 40 % RH, 70 – 90 % RH
- Highly accurate temperature measuring: $\pm 1\text{ }^{\circ}\text{C}$ (Max.), 10 – 40 $^{\circ}\text{C}$; $\pm 1.5\text{ }^{\circ}\text{C}$ (Max.), –10 – 10 $^{\circ}\text{C}$, 40 – 75 $^{\circ}\text{C}$
- Supports up to 8 daisy-chained devices
- Multiple interfaces to broaden applications –
 - 1 x RJ-45 input port, 1 x RJ-45 output port, and 1x RJ-11 input port support connection with PG PDU series and [EA1140](#) / [EA1240](#) / [EA1340](#) environmental sensors
 - 1 x terminal block supports [EA1440](#) / [EA1441](#) / [EA1442](#) door sensor and [EA1540](#) capacitive leakage sensor
- Meets flexible installation purposes –
 - Included 1.5 m RJ-45 cable for ideal location placement
 - Contains a magnet for sticking to metallic surfaces
 - Included rack mount kits enable quick installation inside racks
- Overload protection prevents overheating of the protected equipment
- LED indicator is visible through the enclosure
- Prevents device malfunctions thanks to early detection in case of overheating / excessive humidity
- Suitable for applications that require precise measuring, such as server rooms, data centers, hospitals, smartfactories, and green offices

Specifications

Electrical	
Environment Sensor Ports	1 Port Terminal Block for Door Sensor (EA1440/EA1441/EA1442)/ Capacitive Leakage Sensor (EA1540) 1 Port RJ-11 for Original Temperature Sensor (EA1140/EA1240/EA1340)
Measurement	
Range	Temperature: -10 to +75 °C Humidity: 0 to 100%
Accuracy	Temperature: ±1°C (max), 10 to 40 °C ±1.5°C (max), -10 to 10 °C, 40 to 75 °C Humidity: ±7.5% RH, 30-70% RH ±15% RH, 15-40% RH, 70-90% RH
Power Consumption	DC12V:0.273W:1BTU/h Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environmental	
Humidity (Operating & Storage)	0 – 80% RH, Non-Condensing
Temperature (Operating / Storage)	-10 to 75 °C / -20 – 70°C
Physical Properties	
Dimensions (L x W x H)	10.44 x 3.57 x 2.14 cm (4.11 x 1.41 x 0.84 in.)
Weight	0.05 kg (0.11 lb)
Cable Length	1.5M(RJ45+RJ45) round cable
Housing	Black Polycarbonate
Compliance	
EMC Verification	EMC/FCC, Class A
Safety Verification	By Request
LEDs	
LED Indicator	[Solid]: EA1640 is in working mode [Fast Blinking (for 2 minutes)]: EA1640 receives the command "FindMe". [Slow Blinking (for 10 seconds)]: Over-current protection (OCP) is triggered, and the sensor(s) connected to EA1640 is going to power off. [Slow Blinking]: Firmware upgrade of EA1640 is in progress.
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram

