

Elevate Intelligent PDU Temperature Humidity Sensor with Cable



Product Overview

A new generation, single-chip integrated temperature and humidity sensor, developed using the GXHT3 weak-signal detection platform and advanced MEMS process design. High-sensitivity MEMS humidity sensing elements are integrated directly on chip, minimising interference associated with multi-chip signal transmission and improving measurement stability and accuracy.

Featuring a wide operating voltage range of 3.3–5 V, the sensor is well suited to a variety of power supply environments. Devices are supplied with connection cable options of 1 m, 2 m, or 3 m to support flexible installation requirements.

The PDUs feature individual socket monitoring and switching, and also support sequential startup, enabling controlled power distribution and enhanced operational safety.

- ✓ An accuracy of $\pm 5\%RH$ and $\pm 0.5^{\circ}C$
- ✓ Single chip integrated temperature and humidity sensor
- ✓ High reliability and long-term stability
- ✓ Measure relative humidity in the range of 0-100%
- ✓ Measurement Temperature in the range of $-35 \sim 110^{\circ}C$
- ✓ Response time of 5 milliseconds

Product Specifications

Feature	Values
Temperature Range	-35 °C to + 110°C
Accuracy	± 5 %RH and ± 0.5 ° C
Humidity Range	0 - 100% Relative Humidity
Response Time	5ms

Product Standards

Applicable standard	Detail
Directive 2008/98/EC (WFD)	Waste Framework Directive — compliant. Implemented in the UK through the Waste (England and Wales) Regulations 2011 (SI 2011 No. 988).
ECHA SCIP Database	Compliant; product does not contain SVHCs (Substances of Very High Concern) as defined under REACH Article 33(1). Submission obligations met under EU REACH and UK REACH.
Regulation (EU) 2019/1021 (POPs)	EU Regulation on Persistent Organic Pollutants — compliant. For Great Britain, compliance is aligned with the Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (SI 2020 No. 1355).
Directive 2011/65/EU (RoHS II)	Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment — compliant. Applies within EU member states.
Directive (EU) 2015/863 (RoHS III)	Amending Directive 2011/65/EU to add four phthalates (DEHP, BBP, DBP, DIBP) to Annex II — compliant.
UK SI 2012 No. 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (UK RoHS) — compliant for Great Britain. Retained EU law, as amended by the Product Safety and Metrology (Amendment etc.) (EU Exit) Regulations 2019.

Part Number Table



Part Number	Description
575-500-201	Elevate Intelligent PDU Temperature Humidity Sensor with cable 1 m
575-500-202	Elevate Intelligent PDU Temperature Humidity Sensor with cable 2 m
575-500-203	Elevate Intelligent PDU Temperature Humidity Sensor with cable 3 m