COOL GUARD
— Sensors to Cloud —
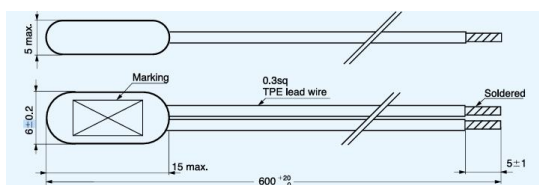
Temperature - Humidity Sensors

Technical Specifications

Sensor Specification

Temperature Sensor Specification

Type	NTC sensor with high sensitivity, ideal for cold storage and precision monitoring environments.
Temperature Range	-40°C to +60°C
Temperature Accuracy	±1°C across the full measuring range
B Value	3435 K +/- 1*C
Casing & Cable	The temperature sensor is encased in epoxy resin for enhanced durability and environmental resistance,with a Teflon-coated wire for added protection and flexibility
Response time	Quick response time to capture real-time fluctuations and provide accurate readings to the cloud.
Mounting	Wall / Ceiling-mountable for optimal air temperature measurement, ensuring data represents true ambient conditions.
Dimensions	• Casing length: 15 mm (max) • Casing diameter: 6 ± 0.2 mm • Maximum overall height: 5 mm • Lead wire length: 600 mm (+20/-0 mm) • Soldered wire end: 5 ± 1 mm
Lead Wire	0.3 sq TPE lead wire

Humidity Sensor Specification

Type	Capacitive humidity sensor designed for continuous environmental monitoring
Humidity Range	0-100% relative humidity, ensuring it can capture variations across the entire humidity spectrum.
Humidity Accuracy	High accuracy of ±2-3% RH, suited for applications that require strict humidity control.
Operating Condition	Suitable for use in various environments, including high-moisture areas like cold rooms or refrigerated storage.
Casing	Enclosed in a casing that protects against dust, moisture, and accidental contact, ensuring stability and reliable operation over time.
Drift Stable	Wide Sensor Area
Mounting	Wall / Ceiling-mountable to avoid interference from localized conditions
Dimensions	88mm (L) 18mm (Ø)

Power Supply

External 12V DC, 1 Amp, with low power consumption design for efficient energy use.

Conductor: High conductivity, bare annealed copper flexible conductor, EC copper class 5 and class 6, generally conforms to IEC 60225, DIN VDE 0281

Insulation: PVC insulated and PVC sheathed

Color Code: 3 PIN: Red, Black, Yellow/Green

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CoolGuard IoT Devices offer advanced, real-time monitoring solutions designed for precise temperature and humidity control in critical environments such as cold storage, medical facilities, and logistics. With seamless cloud integration, high-accuracy sensors, and remote access capabilities, CoolGuard devices ensure continuous oversight, alerting users instantly to any deviations. Built to meet rigorous industry standards, CoolGuard provides reliable data insights to protect sensitive assets and maintain compliance.