

2 Channel Cloud Logger

Technical Specifications

System Overview

The 2 - Channel Cloud Logger by CoolGuard is a high-precision temperature and humidity monitoring system designed to provide real-time visibility, compliance, and quality assurance. Data is transmitted from sensors to a centralized cloud platform via a GSM-GPRS enabled gateway, allowing users to remotely monitor and manage temperature conditions in critical environments like cold storages.

Cloud Logger Specification

Channel Capacity	The device supports up to 2 input channels, allowing simultaneous monitoring across 2 sensors for small / medium cold storage setups
Communication Protocol	GSM-GPRS
GPRS Frequency Band	850/900/1800/1900 MHz
Data Logging Interval	Configurable between 1 to 60 minutes, allowing flexibility based on monitoring needs and data requirements.
Memory	Inbuilt memory for data backup in case of connectivity disruptions, ensuring no data loss.
Housing	IP55
Dimensions	40 x 78 x 55 mm
Firmware Update	Over-the-Air (OTA) capability
Power Supply	External 12V DC, 1 Amp, with low power consumption design for efficient energy use.
Durability	Industrial-grade components designed to withstand high usage rates and environmental stress in commercial storage facilities.
Integrated Relay Support	Supports up to 1 Amp, enabling seamless control of essential cold storage functions like compressors or hooters
Display Compatibility	LED / TFT for local data viewing

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	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.

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