



Sensors to Cloud

Kryo 101 AA

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

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.