

# CUG-600GEAT



## »» Introduction »»»

### Overview

The CUG-600GEAT (extended temperature) and CUG-600GAT (standard temperature) are Industrial 6-port Full Gigabit Unmanaged Power over Ethernet switches with 6 10/100/1000Base-T(X) which supports IEEE 802.3z, full/half duplex and MDI/MDI-X auto-sensing RJ-45. It comes with 4 IEEE 802.3af/at PoE/PoE+ ports. The switch is designed with wide range redundant power input 24/48VDC and housed in IP30 robust enclosure for industrial applications. For safety, it supports reverse polarity protection, overload current protection and alarm relay contact.

One remarkable feature of CUG-600GEAT & CUG-600GAT is the built-in high efficiency power booster design to boost PoE output voltage and regulated PoE output voltage (55VDC) to stabilize the PoE device. The excellent design guarantees delivery of PoE power distance to 100 meters. The original IEEE 802.3af PoE standard provides up to 15.4W of DC power to each device while IEEE 802.3at (PoE+) can provide up to 30W of power. CUG-600GEAT and CUG-600GAT supports power budget of 120W.

## »» Features »»»

### High Performance Network Switching Technology

- Complies with IEEE standards
- Provides 6 x 10/100/1000Base-T(X) with RJ-45 connector,
- 4 x PoE/PoE+ ports and each port support power output up to 30 watts per port
- Max. PoE power budget at 120 watts
- Supports flow control and jumbo frame
- Provides DIP switch for broadcast storm protection and alarm setting

### Reliable Power Design

- Supports 24 to 48VDC redundant power input

- Power reverse polarity protection and overload current protection

### Robust Industrial Design

- EN 61000-6-2 and EN 61000-6-4 certified to use in heavy industrial environment
- EN 50121-4 certified for Railway Applications (Track Side)
- Robust industrial design case complies with IP30 housing standard
- Supports operating temperature -10 to 60°C & extended temperature -40 to 75°C
- DIN-Rail or optional wall mounting installation

## »» Specifications »»»

### Hardware Specifications

#### Interface

**Total Ports:** 6 ports

**RJ-45 Ports:** 6 x 10/100/1000Base-T(X) auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X

**LEDs:** System: Power 1 (Green), Power 2 (Green), Fault (Amber)

RJ-45 Ports: 100 (Green), 1000 (Amber), LNK/Active: Green

PoE: Active (Green On), Inactive (Green Off), Fault\* (Green Flash)

\* The fault conditions are: Overload, Short Circuit, Port Fail at Startup

**DIP Switch:** DIP 1: OFF (Enable power failure alarm) / ON (Disable)

**DIP 2:** OFF (Enable broadcast storm protection) / ON (Disable)

**Alarm Contact:** 1A@24VDC

#### Power Requirements

**Power Input:** 24 to 48VDC, redundant dual inputs

**Power Consumption:**

24VDC: 142.9 (Full load with PoE), 22.9W (Without PoE), Booster Efficiency 94~97%

48VDC: 139.6 (Full load with PoE), 19.6W (Without PoE), Booster Efficiency 94~97%

**PoE Power Budget:** Max. 120W for total PD consumption

Built-in high efficiency power booster to boots up and regulate the output power at 55VDC for PoE/PoE+ requirement, and to stabilize the PDs with guarantee deliver of PoE power up to 100 meters

**Power Protection:** Reverse polarity protection, overload current protection

#### Physical

**Dimensions:** IP30 standard, 62.5mm (W) x 134.8mm (H) x 106mm (D)

**Installation:** DIN-Rail or optional wall mounting

#### Environmental

**Operating Temperature:** Regular: -10 to 60°C, Extended: -40 to 75°C

**Storage Temperature:** -40 to 85°C

**Operating Humidity:** 5% to 95% RH (Non-condensing)

#### Technical

**Standard:**

IEEE 802.3 10Base-T Ethernet

IEEE 802.3u 100Base-TX/100Base-FX

IEEE 802.3ab 1000Base-T

IEEE 802.3x Flow Control

**Protocol Technology:** CSMA/CD

**Switching Architecture:** Store and Forward

#### Regulatory Approvals

**EMC:** CE, EN 61000-6-2, EN 61000-6-4

**EMI:** FCC Part 15 Subpart B Class A, CE EN55022 Class A

**EMS:** EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8

**Railway Application (Track Side):** EN 50121-4 (Certified)

**Shock:** IEC 60068-2-27

**Vibration:** IEC 60068-2-6

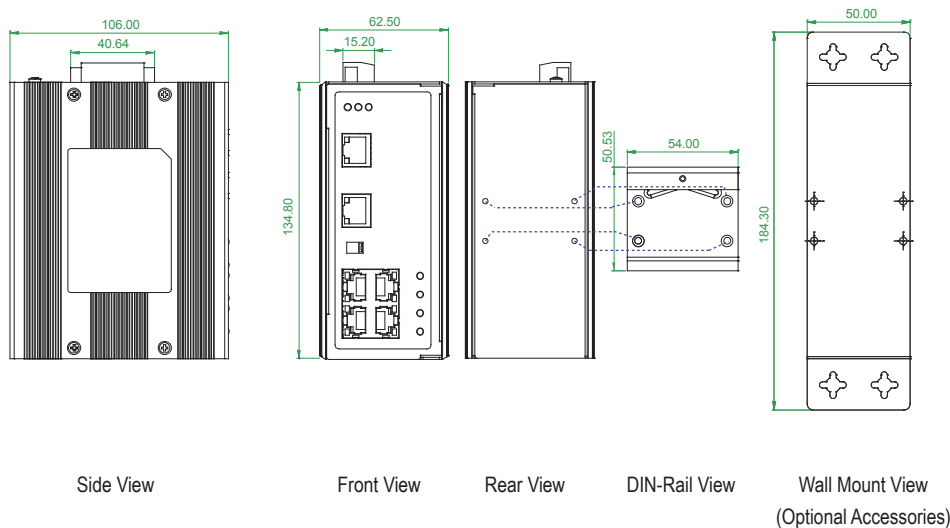
**Free Fall:** IEC 60068-2-32

**Environmental:** WEEE, RoHS

**MTBF:** 649,579 hours based on Mil-Hdbk-217F, GB

**Warranty:** 5 years

Dimensions (unit=mm)



Ordering Information

<b>CUG-600GAT</b>	Industrial 6 x 10/100/1000Base-T(X) Full Gigabit Unmanaged PoE/PoE+ Ethernet Switch, -10 to 60°C
<b>CUG-600GEAT</b>	Industrial 6 x 10/100/1000Base-T(X) Full Gigabit Unmanaged PoE/PoE+ Ethernet Switch, -40 to 75°C

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