RUG-118GSEN

Introduction

Overview

RUG-118GSEN is harsh environment certified Industrial Slim Gigabit to Fiber Converters with one 10/100/1000Base-T(X) Gigabit port and one small form pluggable (SFP) port. With the SFP port, these converters transmit data at high speed for long distances with fiber modules supporting gigabit fiber. The device supports dual power inputs with reverse polarity protection, overload current protection and designed with wide input power of 12/24/48VDC. Its IP30 housing protection, wide operating temperature and DIN-Rail mounting makes these converters suitable for harsh industrial applications. This product is EN 50121-4 certified for railway traffic and UL 60950-1 certified for safety in information technology equipment and heavy industrial EMS & EMI.
The operating temperatures is -20 to 80oC.

Features

High Performance Network Switching Technology
- Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3z
- Provides 1 x 10/100/1000Base-T(X) Ethernet port with RJ-45 connector
- Provides 1 x 100/1000Base SFP slot
- Supports dip switch adjustable Link Fault Pass-through (LFP) function
- Supports 9K Jumbo Frame

Reliable Power Design
- Supports 12 to 48VDC redundant power input
- Power reverse polarity protection and overload current protection
- Alarm relay design for power or port failure detection

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 -20 to 80°C
- DIN-Rail or optional wall mounting installation

Specifications

Hardware Specifications

Interface

Total Ports: 2 ports
RJ-45 Port: 1 x 10/100/1000Base-T(X) auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X
Fiber Port: 1 x 100/1000Base SFP slot
LEDs: Power 1 (Green), Power 2 (Green), Fault (Amber)
Fiber: LNK/ACT (Green); Speed: 100M (Green), 1000M (Yellow)
LAN: LNK/ACT (Green); Speed: 100M (Green), 1000M (Yellow)
Alarm Contact: 1A@24VDC
DIP Switch:
DIP 1: OFF (Enable Power Alarm) / ON (Disable Power Alarm)
DIP 2: OFF (Enable Port Alarm) / ON (Disable Port Alarm)
DIP 3: OFF (Disable Link Fault Pass-through) / ON (Enable Link Fault Pass-through)
DIP 4: OFF (Enable Switch Mode) / ON (Enable Pass Through Mode)
DIP 5: OFF (SFP: 1000M) / ON (SFP: 100M)
Link Fault Pass-through (LFP): If Copper or Fiber port link down, the converter will force another port to shutdown too.

Power Requirements

Power Input: 12 to 48VDC (9.6~60VDC), redundant dual inputs
Power Consumption: 4.2 watts
Power Protection: Reverse polarity protection, overload current protection

Physical

Dimensions: IP30 standard, 38.6mm (W) x 142.1mm (H) x 106mm (D)
Installation: DIN-Rail or optional wall mounting

Environmental

Operating Temperature: -20 to 80°C
Storage Temperature: -40 to 85°C
Operating Humidity: 5% to 95% RH (Non-condensing)

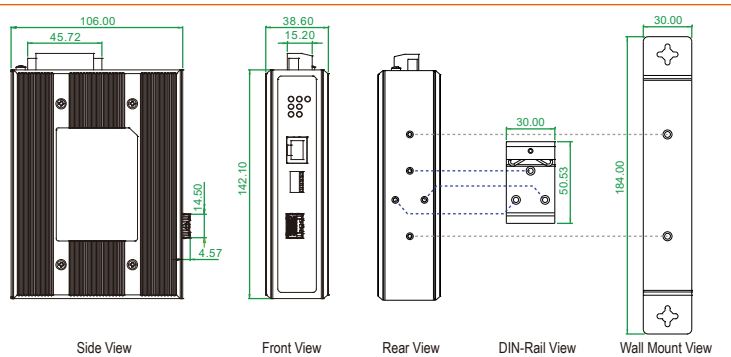
Technology

Standard:
IEEE 802.3 10Base-T Ethernet
IEEE 802.3u 100Base-TX/100Base-FX
IEEE 802.3ab 1000Base-T
IEEE 802.3z Gigabit Fiber
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,
Safety: UL 60950-1
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: 1,198,203 hours based on Mil-Hdbk-217F, GB
Warranty: 5 years

Dimensions (unit=mm)



Ordering Information

RUG-118GSEN	Industrial 1 x 10/100/1000Base-T(X) + 1 x 100/1000Base SFP Slim Full Gigabit Ethernet to Fiber Media Converter, -20 to 80°C