



# RUE-111SENM02



## Introduction

### Overview

RUE-111SENM02 are Industrial Slim Ethernet to Fiber Converters with one 10/100Base-T(X) Ethernet port and one 100Base-FX multi-mode SC fiber port. With the fiber port, these converters transmit data at high speed for long distances up to 2km. RUE-111SENM02 is equipped with a terminal block to provide dual power inputs with reverse polarity 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. These products are EN 50121-4 certified for railway traffic and UL 60950-1 certified for safety in information technology equipment. The RUE-111SENM02 has an operating temperature of -40 to 80°C.

## Features

### High Performance Network Switching Technology

- Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3x
- Provides 1 x 10/100Base-T(X) Ethernet port with RJ-45 connector
- Provides 1 x 100Base-FX multi-mode fiber port with SC connector
- Supports dip switch adjustable Link Fault Pass-through (LFP) function

### 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 -40 to 80°C
- DIN-Rail or optional wall mounting installation

## Specifications

### Hardware Specifications

#### Interface

**Total Ports:** 2 ports

**RJ-45 Port:** 1 x 10/100Base-T(X) auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X

**Fiber Port:** 1 x 100Base-FX Multi-mode with SC connector

**LEDs:** Power 1 (Green), Power 2 (Green), Fault (Red), Fiber (Green), 100 (Amber), LAN (Green)

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

#### DIP Switch:

DIP 1: OFF (Auto: Auto Negotiation Mode) / ON (Force: Auto Negotiation Mode)

DIP 2: OFF (Copper: 100Mbps) / ON (Copper: 10Mbps)

DIP 3: OFF (Copper: Full Duplex) / ON (Copper: Half Duplex)

DIP 4: OFF (Disable Link Fault Pass-through) / ON (Enable Link Fault Pass-through)

DIP 5: OFF (Disable Flow Control) / ON (Enable Flow Control)

DIP 6: OFF (Switch Mode) / ON (Pass through Converter mode)

**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, redundant dual inputs

**Power Consumption:** 2.9 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:** -40 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 802.3x 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

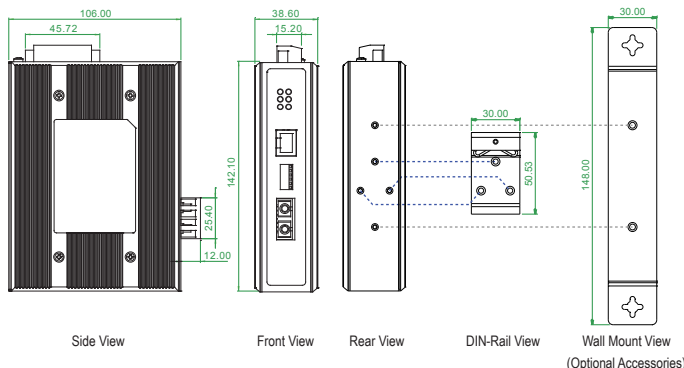
**Free Fall:** IEC 60068-2-32

**Environmental:** WEEE, RoHS

**MTBF:** 1,199,572 hours based on Mil-Hdbk-217F, GB

**Warranty:** 5 years

## Dimensions (unit=mm)



## Ordering Information

RUE-111SENM02

Industrial 1 x 10/100Base-T(X) + 1 x Multi-mode 100Base-FX Slim Ethernet to Fiber SC Media Converter, -40 to 80°C (2km)