# RUE-113SENK50

## Introduction

### Overview

RUE-113SENK50 are Industrial Slim Ethernet to Fiber Converters with one 10/100Base-T(X) Ethernet port and one 100Base-FX single-mode SC fiber port. With the fiber port, these converters transmit data at high speed for long distances up to 50km. RUE-113SENK50 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-113SENK50 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 single-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 Single-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)

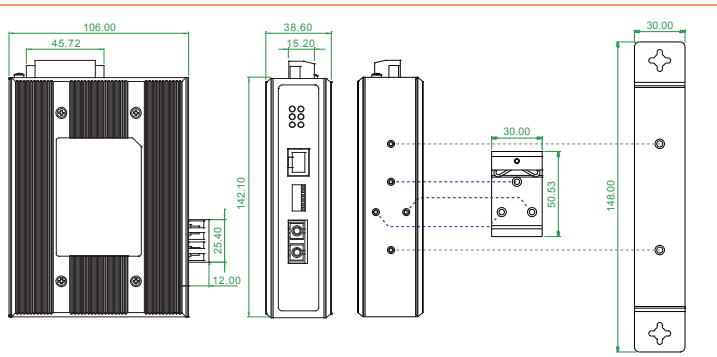
#### Technology

**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)




Side View | Front View | Rear View | DIN-Rail View | Wall Mount View (Optional Accessories)

## Ordering Information

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|---|---|
| **RUE-113SENK50** | Industrial 1 x 10/100Base-T(X) + 1 x Single-mode 100Base-FX Slim Ethernet to Fiber SC Media Converter, -40 to 80°C (50km) |