



**RUE-113**  
**RUE-113E**

## Features

- High Performance Network Switching Technology**
- ✓ Comply with IEEE 802.3, IEEE 802.3u, IEEE 802.3x
  - ✓ Provides 1 x 10/100 Mbps Ethernet ports with RJ-45 connector
  - ✓ Provides 1 x 100 Mbps single-mode SC type fiber port
  - ✓ RJ-45 Port support auto MDI/MDI-X crossover
  - ✓ Supports Link Loss Forwarding function
  - ✓ Supports IEEE 802.3x flow control on full duplex, back pressure on half duplex
- Robust Industrial Design**
- ✓ Robust Aluminum case complying to IP-31 housing standard
  - ✓ Supports operating temperature -10 to 70°C & extended temperature -40 to 80°C
- ✓ DIN-Rail, Panel mount or desktop installation
  - ✓ High level of immunity to electromagnetic interference typically found in industrial plant environments or external curb side enclosures
- Reliable Power Design**
- ✓ Wide range redundant power design
  - ✓ Equipped with Redundant power inputs
  - ✓ Supports 12 to 48VDC redundant power with polarity reverse protection
  - ✓ Removable terminal block



## Overview

The Retriever RUE-113 is an Industrial Ethernet to fiber with one 10/100 Mbps Ethernet port and one single-mode fiber port. With the fiber optic port, RUE-113 transmits data at high speed for long distances up to 30km with an SC connector. RUE-113 is equipped with a terminal block to provide dual power inputs with reverse polarity protection. The built-in Link Loss Forwarding promptly alarms users in case of port breaks or power failure. Its IP-31 housing protection, wide operating temperature of -10 to 70°C and DIN-Rail mounting makes RUE-113 suitable for an industrial environment. The E version has wider temperature range of -40 to 80°C. The RUE-113 is a plug-and-play solution for your Industrial Ethernet applications.

## Hardware Specifications

### Interface

**RJ-45 Ports:** 1 10/100Base-TX auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X

**Fiber Ports:** 1 100Base-FX single-mode port (SC connector)

### LEDs:

Power (Green), Power1 (Green), Power2 (Green), Fault (Orange)

Fiber: Link/Activity (Green), Half/Full Duplex (Green)

TX: 10/100 (Green), Link (Green), Full Duplex (Orange)

**Power Input:** VDC 12 to 48V

Redundant power with removable terminal block

**Power Protection:** Power Reverse Polarity

**Power Consumption:** 4.6 watts

**Dimensions:** IP-31 standard, 54 mm (W) x 135 mm (H) x 105 mm (D)

**Installation:** DIN-Rail, panel mounting or desktop

### Environmental

**Operating Temp:** Regular: -10 to 70°C  
Extended: -40 to 80°C

**Storage Temp:** -40 to 85°C (-40 to 185°F)

**Operating Humidity:** 5% to 90% RH (non-condensing)

## Technical Specifications

### Standard:

IEEE 802.3 10Base-T Ethernet

IEEE 802.3u 100Base-TX Fast Ethernet

IEEE802.3x Flow Control and Back-pressure

### Network Media:

10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m)

100Base-TX: 2-pair UTP/STP Cat. 5/5e cable EIA/TIA-568 100-ohm (100m)

**Protocol Technology:** CSMA/CD

**Switching Architecture:** Store and Forward

### DIP Switch:

Dip Switch 1 : OFF for disabling port alarm, ON for enabling port alarm

Dip Switch 2 : OFF for disabling LLF, ON for enabling LLF

Dip Switch 3 : OFF for 100Base-FX full mode, ON for 100Base-FX half mode

Dip Switch 4 : OFF for Auto-negotiation, ON for 100Base-TX full duplex mode

**Alarm:** Relay output for port break and power failure

### Link Loss Forwarding:

Any link failure detected by the converter on a failure path will show disconnected alarm so that the switches connected can detect the path failure

## Regulatory Approvals

**EMI:** FCC Class A

### EMS:

EN6100-4-2, EN6100-4-3, EN6100-4-4, EN6100-4-5,  
EN6100-4-6, EN61000-4-8, EN61000-4-11

**Safety:** UL, cUL, CE/EN60950

**Shock:** IEC60068-2-27

**Vibration:** IEC60068-2-6

**Free Fall:** IEC60068-2-32

**Class 1 DIV 2:** Pending\*

**DNV:** Pending\*

**Environmental:** WEEE, RoHS

**MTBF:** 325,000 hrs based on Mil-Hdbk-217F, GB

**Warranty:** 5 years