

Industrial Ethernet To Fiber Converter



RUE-112
RUE-112E

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 multi-mode ST 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-112 is an Industrial Ethernet to fiber with one 10/100 Mbps Ethernet port and one multi-mode fiber port. With the fiber optic port, RUE-112 transmits data at high speed for long distances up to 2 km with an ST connector. RUE-112 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-112 suitable for an industrial environment. The E version has wider temperature range of -40 to 80°C. The RUE-112 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 multi-mode port (ST 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