RUE-112
RUE-112E

Industrial Ethernet To Fiber Converter

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 deg C & Extended temperature -40 to 80 deg C
- ✓ DIN-Rail, Panel mount or desktop installation
- ✓ High level of immunity to electromagnetic interference & power supply surges typically found in industrial plant environments or external curb side enclosures

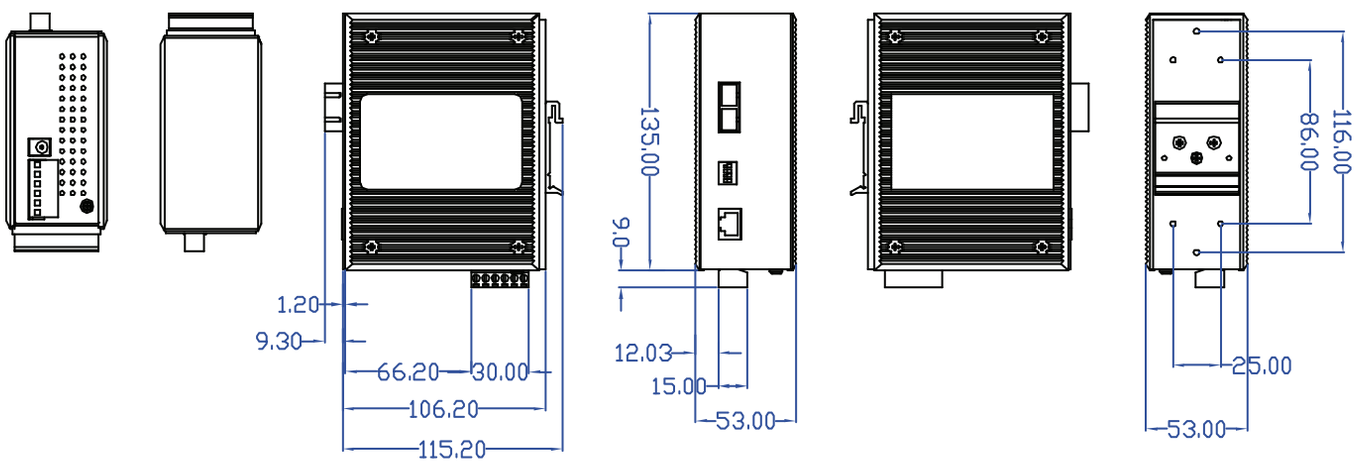
Reliable Power Design

- ✓ Wide range redundant power design
- ✓ Equipped with Redundant power inputs
- ✓ Supports 12 to 48VDC redundant power with polarity reverse protection
- ✓ Terminal block present for master and slave power

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 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 extends the temperature rating to -40 to 80°C. The RUE-112 is a plug-and-play solution for your Industrial Ethernet applications.

Dimensions



Hardware Specifications

Interface

RJ-45 Ports	1 10/100Base-TX auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X
Fiber port	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 12~48V Redundant power with polarity reverse protect function and removable terminal block
Power Protection	Power Reverse Polarity: Present
Power Consumption	4.6 watts
Dimensions	IP-31 standard, 54 mm (W) x 135 mm (H) x 105 mm (D)
Installation	DIN-Rail, Panel mount or desktop

Environmental

Operating Temperature	Regular: -10 to 70°C Extended: -40 to 80°C
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Humidity	5%~90% RH (Non-condensing)

Technology 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 Pass Through Link Fault Return	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 EN-6100-4-4 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

Optical Specifications

Model	Fiber type (um)	Connector	Wavelength (um)	TX Power (min)	TX Power (Max)	Rx Power (Min)	Rx Power (Max)	Link Budget (dbm)	Distance (km)
RUE-112	Multi-mode 62.5/125	ST	1310nm	-19dBm	-14dBm	-31dBm	-14dBm	12dBm	2-3 km
RUE-112E	Multi-mode 62.5/125	ST	1310nm	-19dBm	-14dBm	-31dBm	-14dBm	12dBm	2-3 km

Ordering Information

RUE-112	Industrial Ethernet to Fiber converter, Multi-mode ST, 2km
RUE-112E	Industrial Ethernet to Fiber converter, Multi-mode ST, 2km, Extended Temperature -40 to 80°C

*Extended temperature products are produced to order

Recommended Accessories

DR-4524	45W/2A DIN-Rail 24 VDC power supply
DR-7524	75W/3.2A DIN-Rail 24 VDC power supply
DR-120-24	120W/5A DIN-Rail 24 VDC power supply