Model: UT-2602

Product Name: 100Mbps Network Fiber Optic Transceiver

2-port 100Mbps Network Fiber Optic Transceiver

User Manual

1.Overview

This series is a 100Mbps network fiber optic transceiver that provides two 10/100Base-TX Ethernet ports and one 100Base-FX optical port. It is used for Ethernet port and fiber optic cable data communication, making it the most suitable connector for intelligent communities or fiber-to-the-desktop connections. This series of products supports -40~85℃ operation and good EMC electromagnetic compatibility performance, ensuring normal operation in harsh environments. This series greatly extends the distance of network transmission and can easily achieve interconnection between motherboard servers, repeaters, hubs, terminals, etc., providing an economical, effective, safe and reliable solution for building networks in industries such as video surveillance, finance, education, etc.

2. Major Functions & Features

- Uses high-quality optoelectronic integration module to provide good optical and electrical characteristics, ensuring reliable data transmission and long service life.
- Supports full-duplex or half-duplex mode with automatic negotiation capability.
- 10Mbps and 100Mbps auto-adaptation.
- Auto-MDI/MDIX for all ports, no need for manual operation switch.
- Plug-and-play for convenient use.
- Ultra-wide operating temperature: -40℃ ～ 85℃.
- Ultra-wide voltage input: 12/24/48VDC (10.8~52.8VDC), supports reverse connection protection.
- Flexible support for various fiber interfaces (SC, ST, FC, SFP interface).

3. Hardware specification

Standards

IEEE 802.3 10Base-T

IEEE 802.3u 100Base-TX and 100Base-FX

Interfaces

Fiber port: one 100Base-FX port (optional SC, ST, FC, SFP interface)

RJ45 ports: two 10/100Base-TX ports, auto-negotiation, full/half duplex MDI/MDI-X adaptive

LED indicators: PWR power indicator, FDX fiber indicator, RJ network indicator

Fiber core diameter

Multimode: 50/125, 62.5/125

Single mode: 8.3/125, 9/125, 10/125

Switching performance

Forwarding rate: 148810pps

Transmission mode: Store-and-forward

MAC address space: 1K

Buffer space: 0.5Mb

Backplane bandwidth: 1.2G

Power requirements

Input voltage: 12/24/48VDC(10.8~52.8VDC)

Power consumption: 100mA@24Vmax

Interface terminal: one pluggable 3-pin terminal block

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Overload protection: provided

Reverse connection protection: provided

Mechanical characteristics

Housing: IP40 protection class

Installation method: Din-rail mounting

Mechanical dimensions

100mm x 80mm x 35mm

Package size

180mm x 140mm x 45mm

Operating environment

Operating temperature: -40℃～85℃

Storage temperature: -40℃～85℃

Relative humidity: 0～95%

Industry standards

EMI: FCC Part 15 Subpart B classA, EN55022 class A

EMS:

IEC(EN)61000-4-2(ESD)

IEC(EN)61000-4-3(RS)

IEC(EN)61000-4-4(EFT)

IEC(EN)61000-4-5(Surge)

IEC(EN)61000-4-6(CS)

IEC(EN)61000-4-8

IEC 60068-2-27(Shock)

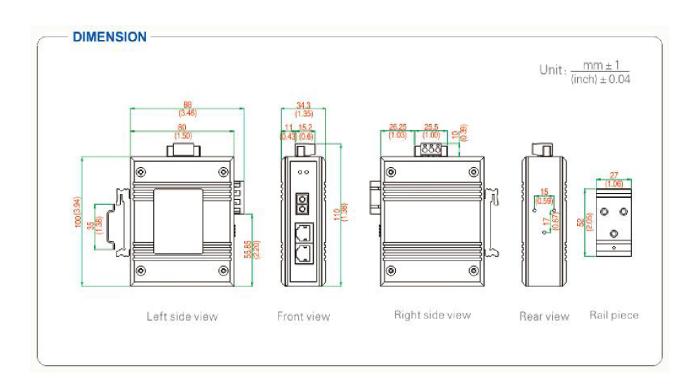| Index parameter		100Base-FX			
		Multi-	Singal-mode		
Dual fiber transmitting and		1310	1310	1310	1550
Send signal fiber (T type)	Send the	1310	1310	1310	1490
	Receive the	1550	1550	1550	1550
Receive signal fiber (R type)	Send the	1550	1550	1550	1550
	Receive the	1310	1310	1310	1490
Transmission distance Km		2	20	40	80
Transmit power dBm		-15~-8	-15~-8	-5~0	-5~0
Receive sensitivity dBm(≤)		-32	-34	-34	-34
Optical saturation dBm		-3	-3	-3	-3
Optical loss dBm/Km		0.5	0.5	0.3	0.25
Electrical port data trasmission		10/100Mbps			

4. Appearance

5. Structure dimensions