



Transceiver instruction manual

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Overview

Fiber optic transceiver is a photoelectric conversion device that converts Ethernet electrical signals into optical signals or optical signals into Ethernet electrical signals. By converting electrical signals into optical signals for transmission over multi-mode or single-mode fibers. The limitation of short cable transmission distance is broken through. Make Ethernet in the premise of ensuring high bandwidth transmission, Using optical fiber media to achieve long-distance transmission of several kilometers or even hundreds of kilometers

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Install and initialize

- 1.Connect the fiber jumper or tail from the fiber terminal box to the fiber transceiver. Note: If dual fiber transceiver, The fiber jumper or pigtail needs to be cross-connected
- 2.Connect the UTP jumper from the network device to the RJ45 port of the fiber transceiver, Choose straight-through cable or cross-over cable according to the requirements of the equipment connected to the fiber optic transceiver, Generally, a crossover cable is required when connecting to a multi-address network device such as a switch, and with the server. A straight-through cable is required when connecting single-address network devices such as workstations.

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- 3.Connect the DC plug of the power adapter to the DC socket of the optical transceiver, Then insert the AC plug of the power adapter into the AC outlet, At this time, the PWR light of the fiber optic transceiver is on, Other indicators flash in sequence according to the self-test sequence, After the self-test is completed, the working state of the transceiver will be determined according to the state of the connected network equipment detected by the fiber optic transceiver, The indicator light will show the working status of the transceiver at this time.

LED indicator light

The fiber optic transceiver has 3 LED indicators, They show the working status of the transceiver, According to LED, You can determine whether the transceiver is working properly and possible problems, To help find the fault. Their roles are described below:

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Indicator light	Function	State	Working state
PWR	Power Indicator	Bright	Have electricity
		Extinguish	No electricity
SC	Optical port link/ status indicator	Bright	Fiber link up
		Flicker	Have data flow
		Extinguish	Fiber link not up
LAN	Electricity Link/ Status Indicators	Bright	Connect
		Flicker	Have data flow
		Extinguish	Not connected

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Optical fiber part parameters

155M						
Optical fiber interface	SC	SC	SC	SC	SC	SC
Fiber Type	Single mode	Single mode	Single mode	Single mode	Single mode	Single mode
Center wavelength (nm)	1310/1550	1310/1550	1310/1550	1490/1550	1490/1550	1490/1550
Transmission distance	20KM	40KM	60KM	80KM	100KM	120KM
Minimum transmit power	-10.0dBm	-5.0dBm	-3.0dBm	-2.0dBm	0dBm	0dBm
Maximum transmit power	0dBm	0dBm	0dBm	0dBm	+2dBm	+3dBm
Receive sensitivity	<-32dBm	<-32dBm	<-32dBm	<-32dBm	<-32dBm	<-32dBm
Allowable link loss	22.0dBm	27.0dBm	29.0dBm	30.0dBm	32.0dBm	32.0dBm

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1.25G						
Optical fiber interface	SC	SC	SC	SC	SC	SC
Fiber Type	Single mode	Single mode	Single mode	Single mode	Single mode	Single mode
Center wavelength (nm)	1310/1550	1310/1550	1310/1550	1490/1550	1490/1550	1490/1550
Transmission distance	3KM	20KM	40KM	60KM	80KM	100KM
Minimum transmit power	-10.0dBm	-10.0dBm	-5.0dBm	-3.0dBm	0dBm	+2dBm
Maximum transmit power	0dBm	0dBm	0dBm	0dBm	+2dBm	+4dBm
Receive sensitivity	<-22dBm	<-22dBm	<-22dBm	<-24dBm	<-24dBm	<-25dBm
Allowable link loss	12.0dBm	12.0dBm	17.0dBm	21.0dBm	24.0dBm	27.0dBm

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Technical Parameter

Connector	Twisted pair: RJ45	Power supply	AC 220V(175250V), 50Hz
Optical fiber	SC	DC	Single +5V or +3.3V
LED	PWR, SC, LAN	Ambient temperature	0~50°C
Transmission rate	twisted pair: 10Mbps, 100Mbps, 1000Mbps (optional)	storage temperature	-20~70°C
Optical fiber duplex mode	100Mbps, 1000Mbps (optional) full duplex or half duplex	Humidity	5%~90%
twisted pair	Category 5, 5E, 6	Power consumption	Less than 2.5W
Optical fiber	single mode: 8/125, 8.3/125, 9/125, 10/125µm	Size of instrument	L94.5*W73*T25MM
		Package dimensions	L197*W124*T64MM

Standard configuration

2 optical fiber transceivers, 2 power adapters, Instructions for use, Warranty card, certificate

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Troubleshooting and troubleshooting

The cause of the problem	Possible reason	Solution
Device PWR does not light up	External power not plugged in	Plug in the external power
	Power module failure	Remove conductors
The Ethernet port is pinged, but there are packet loss	The network is not made into twisted pair	Do right line
	Too many HUBER cascades in the network	Change the network structure, reduce the multi-level connection of HUBER
	The way of work does not correspond	Set the right way to work
The remote electrical port indicator on the local device is off	The remote device is not connected to the power port	Remote electrical port input data
	The remote electrical port is not working properly	Correctly set the remote electrical port
	When networking, connect the electrical port first and then connect the optical port	Re-plug and unplug the network cable of the remote device
The optical port cannot be connected	Optical port receiving and sending reverse	The optical port is connected correctly
	Exceeds the transmission distance of the ordered equipment	Shorten the transmission distance

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Warranty Regulations

- Within 12 natural months after the user receives the goods, Our company will promise the quality and craftsmanship of its products. The warranty period is within twelve natural months from the date of receipt: When the purchased product is found to have quality problems during this period, Our company will make corresponding treatment or replacement, But in any case, Our liability will not exceed the purchase value of the product.
- If there is a problem during use, According to the common fault prompt scheme still can not be solved, Users are not allowed to open the case without authorization. Please contact us.
- For faults caused by product defects, Our company is responsible for free repair or replacement of the product.

Note: This transceiver can only be used in pairs. That is, the optical ports of a pair of transceivers are connected. The electrical ports are connected to the switch, Network devices such as network cards. When the twisted pair interface is initialized, it will set its own state according to the state of the detected docking device. If the status of the other party cannot be detected, The status is uncertain. The fiber optic transceiver will heat up when working, this is normal, Please place the optical transceiver in a dry, ventilated and cool environment to work. It is not the quality problem of transceiver itself. For example, the damage of transceiver IC and components caused by lightning induction and force majeure is not covered by the warranty. Warranty fees will be charged according to the actual damage

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