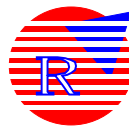


RC303/304-GE-XX

**Copper to Fiber
Media Converter**

User Manual



Beijing Raisecom Science & Technology Co., Ltd.

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Chapter 1. RC303/304-GE-XX Copper to Fiber Media Converter

Introduction

1.1 Article Description

Article Number	Description
RC303/4-GE-S1	Remote managed, 1000Mbps, single mode, single strand, dual-wavelength, 0-25km, RJ45-SC/APC

1.2 Product Specifications

Article Number	Interface	Wavelength (nm)	Transmit Power (dBmW)	Receiving Sensitivity (dBmW)	Receiving Saturation (dBmW)	Supported Link Distance (km)	Attenuation (dB/km)
RC303-GE-S1	SC/APC-RJ45	1310	-5 ~ 0	-25	0	0 ~ 25	0.5
RC304-GE-S1	SC/APC-RJ45	1550	-5 ~ 0	-25	0	0 ~ 25	0.5

1.3 Explanation for the Front Panel and Indicators

1.3.1 Indicators on the front panel

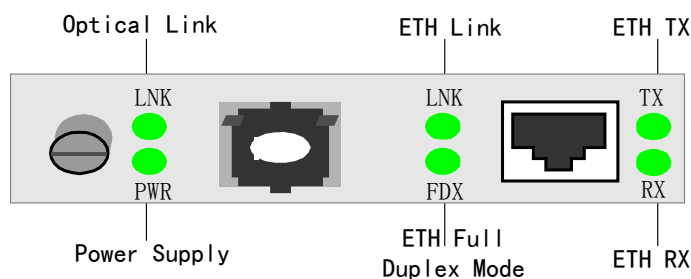


Figure 1. The front panel of RC303/304-GE-XX

The definitions of indicators are as follows:

Interface	Indicator Name	Indicator	Definition
Optical Interface	Optical Link	LNK	ON: Optical link works in good condition
			OFF: Optical link disconnected
Ethernet Port	Ethernet Link	LNK	ON: Ethernet link works in good condition
			OFF: Ethernet link disconnected
	Ethernet Full Duplex Mode	FDX	ON: Ethernet port works in full duplex mode
			OFF: Ethernet port works in half duplex mode
Ethernet Transmit Link	TX	Flashing: Transmitting data at the Ethernet port	
Ethernet Receive Link	RX	Flashing: Receiving data at the Ethernet port	
Power Supply	Power Supply Indicator	PWR	ON: Power supply works in good condition
			OFF: Power supply disconnected

Chapter 2. Connection Configuration

2.1 Media Converter Interconnection

When interconnecting RC303/304-GE media converters, it is required to comply with the specific connection article numbers according to the following table. Otherwise, the link will not be established, or abnormal data transmission will occur.

Host Site	Remote Site
RC304-GE-S1	RC303-GE-S1

2.2 Connection with Other Equipment (at RJ45 Port)

RC303/304-GE-XX copper to fiber media converter supports MDI/MDIX auto-sensing function.

Media Converter	Other Equipment	Connection Type at Ethernet Port
RC303/304-GE	Switch	Straight-through or Crossover
RC303/304-GE	Hub	Straight-through or Crossover
RC303/304-GE	Router	Straight-through or Crossover
RC303/304-GE	Network Interface Card	Straight-through or Crossover

2.3 Duplex Mode Configuration (RJ45 Port)

The RJ45 port (Ethernet port) of RC303/304-GE-XX media converter works at the data rate of 1000Mbps.

When connected with other network equipment, the Ethernet port of that equipment shall be configured to Full Duplex Mode. Thus, normal data transmission in Ethernet link can be ensured.

2.4 Connection with Other Equipment (at Optical Port)

When connecting RC303/304-GE media converter with other equipment at optical port, the following conditions shall be satisfied:

1. Same wavelength
2. Same bit rate (1000Mbps)
3. Matched optical power.

Chapter 3. Installation and Preparation

3.1 Matching Optical Fiber with the Media Converter

RC303/304-GE-XX shall adopt the single mode fiber, and the connector shall be SC/APC.

3.2 Types of Fiber-optic Cable

The type of the cable for single mode fiber port: 9/125um single mode fiber.

3.3 Ethernet Port

Please use the Cat.5 twisted-pair to connect the media converter. Please note that the twisted-pair cable shall not be longer than 100 meters. For connection configuration, please refer to 2.2 Connection with Other Equipment (at RJ45 Port), Chapter 2.

3.4 Ambience

Working temperature: -20-60°C

Humidity: 5%~90% non-condensing

3.5 Power Supply

Single Slot Chassis: 110V/60Hz AC, 220V/50Hz AC or -48V DC

3.6 Dimensions

Single slot chassis: 158 (width) x 40 (height) x 120 (depth) mm

Chapter 4. Dip-switch Setup

1. The configuration of RC303/304-GE media converter is performed by a 2-bit dip-switch SW2. The configuration details are as follows:

SW2-1	Fault-Pass-Through Function Setup
OFF	Disabled
ON	Enabled

2. The other dip-switch SW1 on the media converter module is only used for the network management system. Users are not allowed to change the factory default setup.
3. The factory default setup of SW2:

Fault-Pass-Through function: disabled

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