


RC-2002B:

10/100Base-TX to 100Base-FX Managed Converter

Key Features

- Supports each converter module media configured and monitored ability:
 - Supports port state enabled/disabled
 - Supports auto-negotiation/forced mode
 - Supports port speed and duplex mode
- Supports wire speed packet forwarding ability as below:
 - 10Base-T: 14880 pps
 - 100Base-TX: 148800 pps
- Supports module per port basic counters for traffic raw data monitor of fiber and TP port as below:
 - Rx Packet Counter
 - Rx Byte Counter
 - Tx Packet Counter
 - Tx Byte Counter
 - Error Counter
 - Collision Counter
 - Tx Speed (bps)
 - Rx Speed (bps)
- Supports RMON counters for port traffic quality monitoring function
- Supports bandwidth rating per port ingress and egress rate limit 100Mbps with 1Mbps granularity
- Supports max packet length: 1916 bytes
- Supports 802.3x flow control for full-duplex ports and backpressure for half-duplex ports
- Supports comprehensive types of fiber with different distances and connections, including SC/ST/Bidi/LC and so on
- Supports one 10/100Base-T Fast Ethernet UTP port and one 100Base-FX Fast Ethernet Fiber port
- Supports Q-in-Q double tagged frame transparent
- Supports firmware upgrade by TFTP
- Supports converter mode (only block Pause frame 01-80-c2-00-00-01 and supported L2 protocol)
- Supports Module Information (S/N, MAC, Model Name)

Technical Specifications

- **Standards Compliance:**
 - IEEE 802.3 10Base-T specification
 - IEEE 802.3u 100Base-TX specification
 - IEEE 802.3x full-duplex flow control specification
 - 100Base-FX Fast Ethernet Fiber specification
- **Network Interface:**
 - 10/100Base-TX:
 - Connectors: RJ-45
 - Auto-Negotiation
 - Auto-MDIX
 - Transmission: Full/Half-Duplex
 - Max. Cable Length: up to 100m
 - 100Base-FX (Multi mode):
 - Connectors: SC / ST / LC
 - Transmission: Full/Half-Duplex
 - Max. Cable Length: 2Km for 62.5/125mm
 - Wavelength: 1310nm
 - 100Base-FX (Single mode):
 - Connectors: SC / Bidi-SC / Bidi-SFF
 - Transmission: Full/Half-Duplex
 - Max. Cable Length: 100Km for 9/125µm
 - Wavelength: 1310nm or 1550nm
- **Emission and Safety Regulations:**
 - Complies with FCC Part 15 Class A & CE Mark Approval
- **Warranty:** One Year Hardware
90-day Software
- **LED Description**

LED	Color	Function
POWER	Green	Lit when 5V power is coming up
CPU/LOOP	Green	Lit when CPU function is on Blinks when loop test is present
FX LINK/ACT	Green	Lit when fiber connection is good Blinks when any traffic is present
TP LINK/ACT	Green	Lit when TP connection is good Blinks when any traffic is present
TP SPEED	Green	Lit when 100Base-TX connection is good Off when 10Base-T connection is good
TP FDX/ COL	Yellow	Lit when TP full-duplex mode is active or TP Collision happens in half-duplex mode

- Supports per port basic LEDs for monitoring
- Supports media type, connector, wavelength and distance information
- Supports hot-swap and auto reload configuration ability
- Supports IEEE 802.1p Priority
- Supports IEEE 802.1q Tag VLAN
- Supports QoS Classification based on TOS
- Supports intelligent diagnostic for self detection
- Supports external loop back capability
- Supports web-based and text-based management user interface
- Supports SMTP
- Supports DHCP client
- Support E-mail client (SMTP RFC 821) and Mobile Phone short message (SMS) for sending Traps and Alarm message
- Supports Dying Gasp function
- RoHS Compliance

Overview

RC-2002B is designed to make conversion between 10/100Base-TX to 100Base-FX Fast Ethernet. With SNMP agent, web-based management and Telnet text-based menu driven management, the network administrator can logon the converter to monitor, configure and control the activity of each port. In addition, the converter implements bandwidth rating management capability via the intelligent software. The overall network management is enhanced, and the network efficiency is also improved to accommodate and deliver high bandwidth applications.

- **Power Requirement:** 0.8A@+5VDC
- **Consumption:** 4W
- **Ambient Temperature:** 0 to 50°C
- **Humidity:** 5% to 90%
- **Dimensions:** 140.7(L) X 90(W) X 30.6(H) mm

Ordering Information

Model	Description
RC-2002BSC	10/100Base-TX to 100Base-FX Converter, MM SC
RC-2002BST	10/100Base-TX to 100Base-FX Converter, MM ST
RC-2002BSC.S05	10/100Base-TX to 100Base-FX Converter, SM SC 5km
RC-2002BSC.S20	10/100Base-TX to 100Base-FX Converter, SM SC 20km
RC-2002BSC.S40	10/100Base-TX to 100Base-FX Converter, SM SC 40km
RC-2002BSC.S60	10/100Base-TX to 100Base-FX Converter, SM SC 60km
RC-2002BBS5.S20	10/100Base-TX to 100Base-FX Converter, SM Bidi SC 20km, 1550nm
RC-2002BBS3.S20	10/100Base-TX to 100Base-FX Converter, SM Bidi SC 20km, 1310nm
RC-2002BBS5.S40	10/100Base-TX to 100Base-FX Converter, SM Bidi SC 40km, 1550nm
RC-2002BBS3.S40	10/100Base-TX to 100Base-FX Converter, SM Bidi SC 40km, 1310nm
RC-2002BBS5.S60	10/100Base-TX to 100Base-FX Converter, SM Bidi SC 60km, 1550nm
RC-2002BBS3.S60	10/100Base-TX to 100Base-FX Converter, SM Bidi SC 60km, 1310nm