RCFE4 Series
10/100Base-Tx to 100Base-Fx Media Converter

The Rancent RC-FE4 switching type media converter series are four-channel Ethernet electrical to optical media converters. These devices accept four 10/100 Mbps electrical inputs and convert this to a single 100 Mbps optical output. This series of media converters use multimode and singlemode optical fiber and one and two fiber SC and ST optical connectors. The LED indicators on the devices confirm operational status. All these models are environmentally hardened with no electrical or optical adjustments (Plug and Play).

Typical Applications

- Any network utilizing a mix of copper and fiber
- Industrial IP connectivity and communication
- Remote sites with one to four 10 or 100Base-T
- Networks using Ethernet devices such as network cameras, access control, intercoms, etc

Product Features

- 4-Port 10/100Base-T Fast Ethernet RJ-45 Port
- 1-Port 100Base-FX Optical Port
- Complies with the IEEE 802.3 standard
- RJ45 Port Supports 10/100Mbps-Full/Half-duplex, Auto-negotiation, Auto-MDI/MDIX
- Prevents Packet Loss w/Back Pressure (Half-Duplex) and
  IEEE 802.3x PAUSE Frame Flow Control (Full-Duplex)
- Available for ST or SC fiber connector
- Available for operation over singlemode or multimode fiber over a variety of link budget
- Available for operation over 1 or 2 fibers
- No in-field optical adjustment required

Specifications

Physical Ports

Copper Ports (RJ45)	4 x 10/100Base-T
Optical Ports	1 x 100Base-FX
Port Con?guration	Auto MDI/MDI-X
Port Speed	Auto-negotiate

Ethernet

Switch Architecture	Store-and-forward/
MAC Address	2K entries
Maximum Frame Size	1536 Bytes (Jumbo Frames)
Flow Control	Back pressure(Half-Duplex); IEEE 802.3x Pause Frame (Full-Duplex)

Optical

Wavelength	1310/1550nm or 1550/1310nm
Multimode	2KM
Singlemode	20KM
Optical Emitter	Laser Diode
Number of Fibers	1/2
Connector	ST or SC

LED Indicators & Switch

Power	On/Green
Ethernet	Link/Activity - Green
Optical	On/Blink - Green

Electrical and Mechanical

Power Supply	5V 1A
Power Consumption	<2.5W
Dimensions	160 ×95 ×28mm

Environmental

MTBF	>100,000 hours
Operating Temperature	0°C~+55°C
Storage Temperature -	-40°C~+70°C
Relative Humidity	0%~95% (non-condensing)

Standards Compliance

Regulatory Standards	CE; FCC Part 15 Class A IEEE 802.3i 10Base-T IEEE 802.3u 100Base-TX

Ordering Information

Part Number	Description	Connector	Cable	Fiber	Maximum Distance
RCFE4-TM1A	10/100 Mbps 1310/1550nm	ST	MM	1	2KM
RCFE4-TM1B	10/100 Mbps 1550/1310nm	ST	MM	1	2KM
RCFE4-TS1A	10/100 Mbps 1310/1550nm	ST	SM	1	20KM
RCFE4-TS1B	10/100 Mbps 1550/1310nm	ST	SM	1	20KM
RCFE4-CM1A	10/100 Mbps 1310/1550nm	SC	MM	1	2KM
RCFE4-CM1B	10/100 Mbps 1550/1310nm	SC	MM	1	2KM
RCFE4-CS1A	10/100 Mbps 1310/1550nm	SC	SM	1	20KM
RCFE4-CS1B	10/100 Mbps 1550/1310nm	SC	SM	1	20KM
RCFE4-TM2	10/100 Mbps 1310nm	ST	MM	2	2KM
RCFE4-TS2	10/100 Mbps 1310nm	ST	SM	2	20KM
RCFE4-CM2	10/100 Mbps 1310nm	SC	MM	2	2KM
RCFE4-CS2	10/100 Mbps 1310nm	SC	SM	2	20KM

*Optical transmission distance is limited to optical loss of the fiber and any additional lossintroduced by connectors, splices and patch panels.