

RCFE2-POE Series

10/100Base-Tx to 100Base-Fx 802.3at PoE+ Media Converter

The Rancent RCFE2-POE series are two-channel Ethernet electrical to optical media converters with optional PoE+. These auto-negotiating devices accept two 10/100 Mbps electrical inputs and convert this to a single 100 Mbps optical output. This series of media converters are available as multimode or single-mode and one and two fiber SC and ST optical connectors. They provide full compliance with IEEE 802.3at as Power Sourcing Equipment (PSE), with a maximum power of up to 30 Watts @ 48 VDC, making them ideal for those applications where the remote equipment draws significant power.



Typical Applications

- PoE+ operation of IP Cameras, with pan-tilt-zoom capability
- PoE+ operation of IP cameras with heated/cooled housings
- PoE+ operation of transportation-specific/ITS field equipment
- Any networks using Power over Ethernet devices such as IP cameras, intercoms, access control, telephones, variable message signs, etc

Product Features

- 2-Port 10/100Base-T Fast Ethernet RJ-45 Port
- 1-Port 100Base-FX Optical Port
- PoE Compatible: IEEE 802.3af and 802.3at compliant for PoE and PoE Plus
- 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)	2 x 10/100Base-T
Optical Ports	1 x 100Base-FX
Port Configuration	Auto MDI/MDI-X
Port Speed	Auto-negotiate

Ethernet

Switch Architecture	Store-and-forward
Forward Filter Rate	148,800pps (100Mbps)
MAC Address	2K entries
Packet Buffer Size	1M
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

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

POE

Standard	IEEE802.3af IEEE 802.3at
Port	RJ45
Power PIN Assignment	1/2(+), 3/6(-) default
Power Output	48VDC, 15.4Watts 52VDC, 30Watts

Electrical and Mechanical

Power Supply	48~52VDC 1A
Power Consumption	<2.5W
Dimensions	93 x 70 x 25mm

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 IEEE802.3af POE IEEE802.3at POE
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Ordering Information

Part Number	Description	Connector	Cable	Fiber	Maximum Distance
RCFE2-PTM1A	10/100 Mbps 1310/1550nm	ST	MM	1	2KM
RCFE2-PTM1B	10/100 Mbps 1550/1310nm	ST	MM	1	2KM
RCFE2-PTS1A	10/100 Mbps 1310/1550nm	ST	SM	1	20KM
RCFE2-PTS1B	10/100 Mbps 1550/1310nm	ST	SM	1	20KM
RCFE2-PCM1A	10/100 Mbps 1310/1550nm	SC	MM	1	2KM
RCFE2-PCM1B	10/100 Mbps 1550/1310nm	SC	MM	1	2KM
RCFE2-PCS1A	10/100 Mbps 1310/1550nm	SC	SM	1	20KM
RCFE2-PCS1B	10/100 Mbps 1550/1310nm	SC	SM	1	20KM
RCFE2-PTM2	10/100 Mbps 1310nm	ST	MM	2	2KM
RCFE2-PTS2	10/100 Mbps 1310nm	ST	SM	2	20KM
RCFE2-PCM2	10/100 Mbps 1310nm	SC	MM	2	2KM
RCFE2-PCS2	10/100 Mbps 1310nm	SC	SM	2	20KM

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