## ETHERNET OVER FIBER

## RCFE1F1-IND Series

## 1x 10/100Base-TX and 1x 100Base-FX SFP Ethernet Switch

The Rancent RC-FE1F1-IND is a cost-effective Industrial Unmanaged Fast Ethernet Switch equipped with one 10/100Mbps RJ45 port and one 100Mbps SFP (fiber) port. For fast and efficient connectivity from the network edge device to a backbone switch or server, the fast Ethernet switch is designed to extend existing LANs through one 100Base-FX/LX/EX/BX SFP interface using either one or two multimode or singlemode fibers. The switches are also designed with a redundant power supply system to further enhance network reliability and stability. Housed in rugged DIN rail or wall mountable
 enclosures, the switches are well suited for harsh environments such as industrial security, system automation applications and intelligent transportation systems (ITS).

## Typical Applications

- Any network utilizing a mix of copper and fiber
- Industrial IP connectivity and communication

■ Self-healing Fast Ethernet backbone networks

- Networks using Ethernet devices such as network cameras, access control, intercoms, etc


## Product Features

■ 1-Port 10/100Base-T Fast Ethernet RJ-45 Port

- 1-Port 100Base-SX/LX/EX/BX SFP Type Slot

■ Non-blocking store-and-forward switching
■ 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 operation in Ring or point-to-point configuration
- Available for operation over singlemode or multimode fiber over a variety of link budget
- Redundant dual power supply inputs 48/52 VDC
- 4KV Ethernet Surge Protection for harsh environment
- $-40^{\circ} \mathrm{C}$ to $80^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.176^{\circ} \mathrm{F}\right)$ wide range operating temperature
- Compact, corrosion resistant case attaches to a standard DIN Rails


## Specifications

## Physical Ports

| Copper Ports (RJ45) | $1 \times 10 / 100 B a s e-T$ |
| :--- | :--- |
| SFP Uplink Ports | $1 \times 100 \mathrm{Base-FX/LX/EX/BX} \mathrm{SFP}$ |
| Port Configuration | Auto MDI/MDI-X |
| Port Speed | Auto-negotiate |

## Ethernet

| Switch Architecture | Store-and-forward |
| :--- | :--- |
| Switch Bandwidth | 4Gbps (non-blocking) |
| MAC Address | 2K entries |
| Maximum Frame Size | 1536 Bytes (Jumbo Frames) |
| Flow Control | Back pressure(Half-Duplex); |
|  | IEEE 802.3x Pause Frame |
|  | (Full-Duplex) |

## Fiber

| Data Rate | 100Base-FX 802.3u |
| :--- | :--- |
| Connector | SFP (Mini-GBIC) port |
| Fiber Type/Distance | Varies by SFP module |

## LED Indicators \& Switch

Power
Ethernet
SFP Ports (FX1)

On/Green
Link/Activity - Green
On/Blink - Green

## Electrical and Mechanical

DC Power Input Voltage
Full Load Power Consumption
Dimensions
Case
Housing

## Environmental

MTBF
Operating Temperature
Storage Temperature
Relative Humidity

## Standards Compliance

Regulatory Standards

IEC Standards

DC 9~52V, Auto-sensing 9 Watts
$112.7 \times 94 \times 36 \mathrm{~mm}$
IP44 Metal Case
DIN Rail Mounting
$>100,000$ hours
$-40^{\circ} \mathrm{C} \sim+80^{\circ} \mathrm{C}$
$-40^{\circ} \mathrm{C} \sim+80^{\circ} \mathrm{C}$
0\%~95\%
(non-condensing)

CE; FCC Part 15 Class A IEEE 802.3i 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3x Flow Control and Back pressure IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)

## Typical Application



