RCINFE8F2-MS Series
Managed 8x 100/100Base-TX and 2x 100Base-FX SFP Ethernet Switch

The Rancent RCINFE8F2-MS is a cost-effective Industrial Fast Ethernet Managed Switch equipped with eight 10/100Mbps RJ45 ports and two 100Mbps SFP (fiber) ports. For fast and efficient connectivity from the network edge device to a backbone switch or server, the managed 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 Industrial Managed Switches are fully managed Layer 2 switches not only incorporating the industry standard Rapid Spanning Tree Protocol (IEEE802.1w RSTP), but also a rapid ring recovery protocol enabling operational network recovery in the event of a network or power system failure.

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

- 8-Port 10/100Base-T Fast Ethernet RJ-45 Port
- 2-Port 100Base-SX/LX/EX/BX SFP Type Slots
- 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°C to 80°C (-40°F to 176°F) wide range operating temperature
- Real-time monitoring via Embedded Surveillance Device Management System
- Compact, corrosion resistant case attaches to a standard DIN Rails

Specifications

Physical Ports

Copper Ports (RJ45)	8 x 10/100Base-T
SFP Uplink Ports	2 x 100Base-FX/LX/EX/BX 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)

Layer 2 Functions

Management Interface	Console, Cisco® like CLI,telnet, Web browser,SSH/SSL secure access, SNMPv1 and v2c and v3c
Port Configuration Port	enable/disable; Auto-negotiation; 10/100Mbps full-and-half duplex mode selection; Flow control
Port Mirroring	TX/RX/Both；Many to 1 monitoring
Bandwidth Control	Ingress/Egress rate control: configure (100~1000000)Kbps Full Speed 1000000Kbps
VLAN	IEEE 802.1q tagged-based VLAN, up to 256 VLANs groups, out of 4094 VLAN IDs Port-based VLAN. Port-based VLAN, Q-in-Q tunneling, Mac-based VLAN, up to 256 VLANs Protocol-based VLAN, up to 128 VLANs MVR (Multiple VLAN Registration)
Link Aggregation	IEEE 802.3ad LACP / Static Trunk; Up to 5 groups of trunk supported
Quality of Service (QoS)	8 priority queue Traffic classification based on: IEEE802.1p Based Cos, IP DSCP Based Cos
Multicasting/IGMP	IGMP/MLD Snooping (v1,v2, v3) With Query supported
Access Control List	IP-Based ACL/MAC-Based ACL, 256 entries
SNMP MIBs	RFC-1213 MIB-II RFC-2819 RMON MIB (Group 1, 2, 3,9)

Fiber

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

LED Indicators & Switch

Power	On/Green
Ethernet	Link/Activity - Green
SFP Ports (FX1/FX2)	On/Blink - Green

Electrical and Mechanical

Power Input Voltage	DC 9~52V, Auto-sensing
Power Consumption	9 Watts
Dimensions	156 x 114.8 x 60mm
Case	IP44 Metal Case
Housing	DIN Rail Mounting
Storage Temperature	-40°C~+80°C
Relative Humidity	0%~95% (non-condensing)

Standards Compliance

Regulatory Standard	CE; FCC Part 15 Class A

IEEE/RFC Standards	
IEEE 802.3i	10Base-T
IEEE 802.3u	100Base-TX
IEEE 802.3x	Flow Control and Back pressure
IEEE 802.1d	STP (Spanning Tree Protocol)
IEEE 802.1w	RSTP (Rapid Spanning Tree Protocol)
IEEE 802.1s	MSTP (Multiple Spanning Tree Protocol)
ITU-T G.8032/Y.1344 ERPS	(Ethernet Ring Protection Switch)
IEEE 802.1p	QoS/CoS Protocol for Traffic Prioritization
IEEE 802.1Q	VLAN Tagging
IEEE 802.1ad	Stacked VLAN,Q-in-Q
IEEE 802.1ab	LLDP(Link Layer Discovery Protocol)
IEEE 802.1X	Port Authentication Network Control
IEEE 802.3ad	Port trunk with LACP (Link Aggregation Control Protocol)
IEEE 802.3az	EEE (Energy Efficient Ethernet)

IEC Standards	IEC60068-2-32 (Free fall)
	IEC60068-2-27 (Shock)
	IEC60068-2-6 (Vibration)

Typical Application

IP Camera

Access

IP Intercom

ERPS Ring
Average Network
Recovery Time <30ms.

Distance dependent upon SFP and fiber type

Network Switch