



L3 Managed Fiber Switches

FR-9T44F8

Industrial L3 Managed 16-port 100/1000Base-SFP + 4-port 10GBase-SFP + 8-port 10/100/1000Base-SFP or 10/100/1000Base-TX Combo Ethernet Switch with Redundant AC Power Inputs, 1U Rack-mount

Product Data Sheet



FR-9T44F8



Main Features

- Layer 3 Model support OSPFv2, RIPv2, Static Route
- TACACS+, SNMPv3, IEEE 802.1X, HTTPS and SSH to enhance network security
- Link Aggregation, STP/RSTP/MSTP/ERPS for network redundancy
- ROMON for proactive and efficient network monitoring
- Fanless, IP40 Rating, -40 °C ~ 75°C operation temperature design to ensure that the equipment adapts to a variety of harsh environments
- Redundant AC power inputs, anti-reverse connection, overcurrent protection

Overview

The **L3 Managed Industrial Ethernet Switch** is designed for high-performance industrial networking applications requiring reliable data transmission and flexible network architecture. Built on mature switching technologies and open networking standards, the switch delivers stable and efficient Ethernet communication in demanding environments.

The switch features **4 × 10 Gigabit SFP+ uplink ports**, **16 × Gigabit SFP fiber ports**, and **8 × Gigabit combo ports supporting either 10/100/1000Base-T or 1000Base-X SFP**, providing flexible connectivity for both copper and fiber network deployments. With integrated **Layer 3 routing capabilities**, it supports efficient traffic management and network segmentation across complex industrial infrastructures.

Designed for industrial environments, the switch supports **redundant power inputs** and is enclosed in a rugged **IP40-rated metal housing**. It operates within a wide temperature range of **-40°C to 75°C** and supports **standard 19-inch rack-mount installation**, making it suitable for deployment in harsh environments such as industrial automation, transportation systems, and critical infrastructure networks.

Product Specifications

Ethernet Interface		
Model		FR-9T44F8
Ports		4×10Gigabit SFP plus + 16×1000M Base-X SFP + 8×10/100/1000M Base-TX or 8x1000M Base-X SFP Combo
Port Mode(Tx)		Auto-Negotiation Full/Half Duplex Mode Auto MDI/MDI-X Connection
Standards		IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z for 1000BaseSX/LX/LHX/ZX IEEE 802.3ae for 10 Gigabit Ethernet IEEE 802.3x for flow control IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1p for Class of Service IEEE 802.1Q for VLAN Tagging IEEE 802.1X for authentication IEEE 802.3ad for Port Trunk with LACP
Packet Buffer Size		12Mbits
Maximum Packet Length		Up to 10K
MAC Address Table		16K
Transmission Mode		Store and Forward (full/half duplex mode)
Exchange Property		Delay time: < 7μs Backplane bandwidth: 128Gbps
IGMP Group		4096
Max. No. of VLAN		256
VLAN ID Range		VID 1 to 4094
PoE & Power Supply		
Power Consumption		24 Watts Max(without PoE load)
Power Inputs		2
Input Voltage		100-240VAC,Redundant dual inputs
Connector		AC: 3 Pin AC Socket
Protection	Overload Current Protection, Reverse Polarity Protection	
Physical Characteristics		
Housing	Aluminum case	
IP Rating		IP40
Dimensions		400mmx300mmx45mm
Installation		Rack Mount
Weight		2800g

Product Specifications

Environmental

Operating Temperature	-40°C~75°C (-40 to 167 °F)
Operating Humidity	5%~90% (non-condensing)
Storage Temperature	-40°C~85°C (-40 to 185 °F)
MTBF	>250,000@Telcordia(Bellcore)GB
Heat Dissipation	75 BTU/h(Non-PoE Load) 1672 BTU/h(with MAX PoE Load)
Cooling	Passive Cooling Fanless Design
Noise Level	0 dBA

LED	State	Description
PWR (P1&P2)	ON	Power is being supplied
	OFF	Power is not being Supplied.
RUN	Blinking	The system is running well
	OFF	The system is running unwell
FAIL(Only For PoE)	ON	PoE Status is abnormal
	OFF	PoE Status is normal
MAX(Only For PoE)	ON	Total PoE Power out of maximum power budget
	OFF	Total PoE Power under maximum power budget
R.O.	ON	Ring Owner
	OFF	Not Ring Owner
RING	ON	Ring is enabled
	OFF	Ring is disabled
Link/ACT (1-28)	ON	Port connection is active
	Blinking	Data transmitted
	OFF	Port connection is not active.
RJ45 Port Speed	ON	1000M is running
	OFF	No 1000M is running
ALM	ON	Has alarm information
	OFF	No alarm information

Certification Standard

EMC/EMI/EMS	FCC Part15 Class A CE-EMC/LVD RoHS EN61000-4-2 (ESD):LEVEL 4 IEC 6100-4-2 (EFT):LEVEL 4 IEC 6100-4-2 (Surge): LEVEL 4 IEC 6100-4-2 (CS) : LEVEL 3 IEC 61000-4-2(PFMP) : LEVEL 5 EN61000-4-3 (RS):LEVEL 4
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Freefall	IEC60068-2-31
Safety	EN 60950-1, UL 60950-1, CSA C22.2 No.60950-1, UL 508

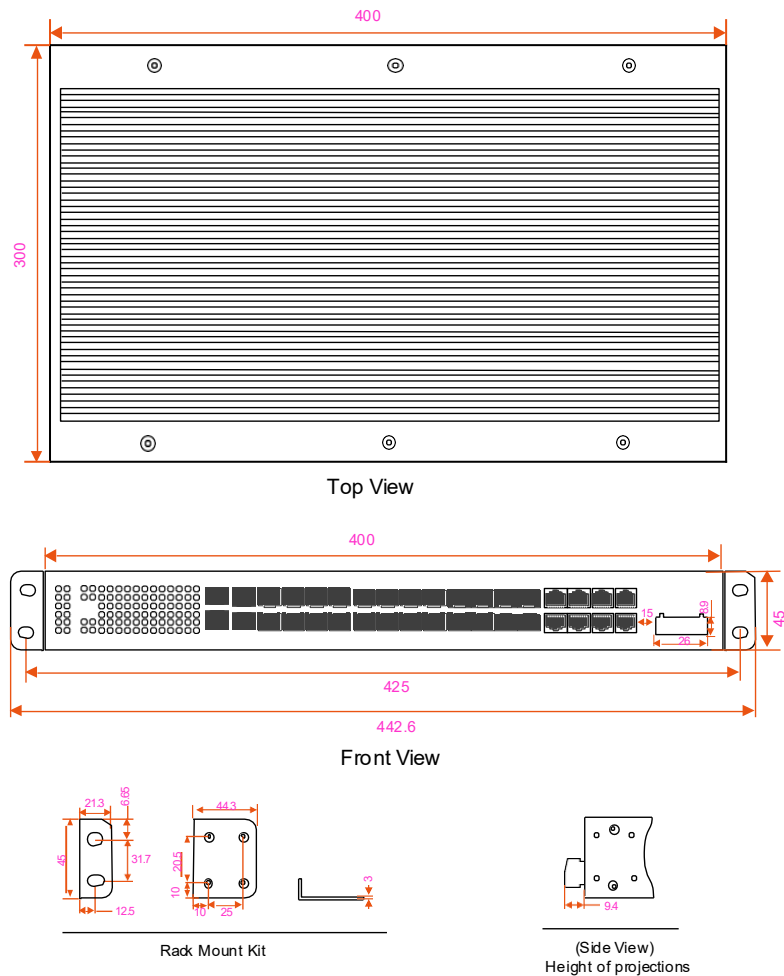
Product Specifications

Package Contents

Device	1x Industrial Ethernet Switch
Cable	1xDB9 female to RJ45 10-pin
Installation Kit	2x Rack-Mount Kits
Documentation	1 x Quick Start guide 1 x Warranty card 1x Product notice

Dimensions

Unit: mm



Ordering Information

Available Model	Description	Input Voltage	Operating Temp.
FR-9T44F8	Industrial L3 Managed 16-port 100/1000Base-SFP + 4-port 10GBase-SFP + 8-port 10/100/1000Base-SFP or 10/100/1000Base-TX Combo Ethernet Switch with Redundant AC Power Inputs, 1U Rack-mount	AC100-240V	-40 °C to 75 °C

Optional Accessories (to be purchased separately)

Power Supply	
FR-I-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
FR-I-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
SFP Optical Transceiver	
(S)=SFP Option	Please select your SFP on our SFP Modules page for details.
Armored Fiber Patch Cable / LAN Cable	
FRPC-A-LC	Armored LSZH LC UPC to LC UPC Duplex OS2 single mode 7.0mm for Outdoor Application , 1-50m
FRLC-A-CAT6	Armored Cat6 Snagless shielded(SFTP) Ethernet Network Patch Cable, 26AWG, 1000Base-T, 0.5m – 3m

Precautions

To prevent equipment damage or personal injury caused by improper operation, please observe the following precautions:

- ❖ Turn off the power before installation. Wear an anti-static wrist strap and ensure proper skin contact to prevent electrostatic discharge (ESD) damage.
- ❖ Ensure the power supply voltage matches the voltage specified on the switch.
- ❖ Before powering on the switch, verify that the power circuit is not overloaded to avoid abnormal operation or equipment damage.
- ❖ Do not open the chassis while the switch is operating. To avoid the risk of electric shock, do not disassemble the device.
- ❖ Disconnect the power before cleaning. Do not use a wet cloth or liquid cleaners.
- ❖ When installing in a rack, mount equipment from bottom to top to prevent overloading.
- ❖ Do not place heavy objects on the switch.

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