

JetNet 4508f

Industrial 8-port Managed Fast Ethernet Fiber Switch



- 6-port 10/100 TX and 2 100Base-FX fiber ports, single-mode Fiber up to 30KM
- 3.2Gbps Switch Fabric with excellent data exchange performance
- Super Ring technology, back up system recovery time less than 20ms and up to 250 sets, Dual Homing and Couple Ring
- SNMP v1/v2c, IGMP snooping v1/v2, RMON, VLAN, QoS, Rate control for network management
- Support 1.2KV Hi-Pot isolation protection
- Redundant power input DC 12~48V
- Fault relay alarm
- Aluminum case with IP-31 grade protection
- -10~70°C operating temperature for hazardous environment application

Overview

JetNet 4508f is a 6 port 10/100TX plus 2 port 100Base-FX fiber Industrial Managed Fast Ethernet Switch with SNMP, Web management interface and innovative software features for various networking applications. The SNMP functionality is compatible with OPC server (Kepware) providing the most popular management functions in automation. Using standard SNMP tools it also has remote management ability.

One of the main challenges in industrial automation applications is to ensure permanent uptime in the system. For this requirement, JetNet 4508f provides the Super Ring mechanism which has 20ms recovery time - faster than RSTP.

The JetNet 4508f can merge RSTP and Super Ring

functionality with core switches through the Dual Homing function to deliver a more reliable networking architecture for system redundancy.

JetNet 4508f has a built in relay output for alarms on port and power outage events. The relay output function will form a short circuit to trigger external one to inform your I.T. engineer when a power or port link down event has occurred. The port link down alarm is enabled by DIP-switch.

For operation in harsh environments, the JetNet 4508f is equipped with dual power input with redundancy and rigid aluminum case with excellent heat radiation allowing a -10~70°C operating temperature.

Full Network Management & Enhanced Super Ring Compatibility

Versatile and User-friendly configuration interface, including SNMP, VLAN, QoS, IGMP, event warning, not only to makes your job easier, but also saves your time and money.

Super Ring is Korenix Ring redundancy technology. The recovery time is <20 ms, the 1st Ring Port of the

R.M. is the primary path. The 2nd Ring Port of the R.M. is the block path. Once the primary path fails, the 2nd path will be recovered within 20ms which gives you a fault-tolerant connection. JetNet 4508 series also support Dual Homing and Ring Coupling, featuring the strong ring redundancy.

Fiber Optic Port Options & High-Speed Transmission

Single-mode and Multi-mode fiber optic ports meet your needs for long distance transmission up to 30KM.

Excellent data transmission performance is provided for you. No works will be delayed with the transmission rate up to 3.2Gbps.

Redundant Power Inputs & Easy Installation

Operating voltage is 12V~48V, the unit can also be cabled with a twin DC24V input. Dual power input and built-in reverse power polarity protection are designed as the redundant power system to ensure your power

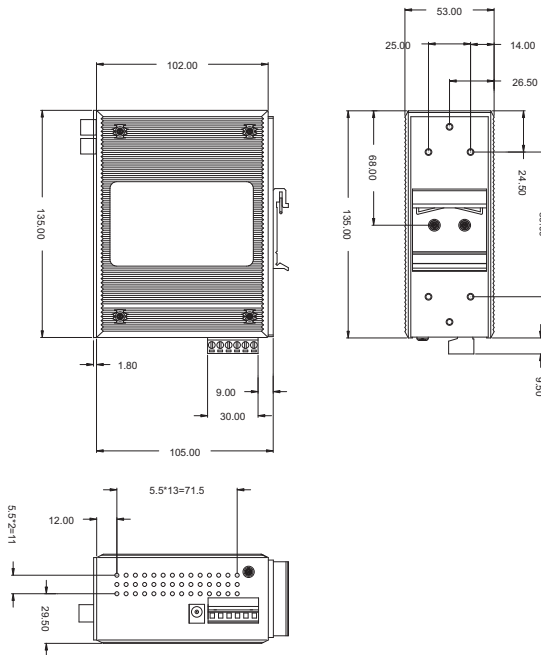
continuity. JetNet 4508f series can be easily wall mounted or mounted directly on DIN rail.

Hazardous Environment Application & True Reliability

The IP-31 rigid aluminum flat casing and wide operation temperature range ensure reliable operation for harsh environment. Extended operating temperature range is available for project-based request.

With the 1.2KV Hi-Pot isolation protection, CE/FCC regulatory approvals, and 5-year global warranty, JetNet 4508f series are your reliable choice for hazardous applications.

Dimensions (Unit –mm)



- Industrial PoE Switch
- IP67/68 Ethernet Switch
- Rackmount Managed Switch
- Gigabit Switch
- Redundant Switch
- Entry-Level Switch
- Networking Computer
- Communication Computer
- Ethernet I/O Server
- Serial Device Server
- Media Converter
- Multiport Serial Card
- SFP Module
- Din Rail Power Supply

Specification

Technology

Standard: IEEE802.3 10Base-T
 IEEE802.3u 100Base-TX/100Base-FX
 IEEE802.3x flow control and Back-pressure
 IEEE802.1d Spanning Tree
 IEEE802.1w Rapid Spanning Tree (RSTP)
 IEEE 802.1Q VLAN
 IEEE802.1p Class of Service

Performance

Switch Technology:

Store and Forward Technology with 3.2Gbps Switch Fabric.

System Throughput: 1.49Mpps

MAC Address: 2K MAC with Auto learning and refresh function

Packet Buffer: 1Mbits

Transfer performance: 14,880pps for Ethernet and 148,800pps for Fast Ethernet and transfer packet size from 64 to 1522Bytes

Management

Configuration: SNMP v1, v2c and Web browser. TFTP update, configuration backup/restore, DHCP client, warm reboot, reset to default, Admin password, Port Speed/Duplex control, status and statistics, SNMP trap, RMON
SNMP MIB: MIB-II, Bridge MIB, RMON, VLAN MIB, Ethernet like MIB, Korenix Private MIB.

SNMP Trap: Support 3 trap stations.

VLAN: Port Based VLAN, Tag VLAN. VLAN ID 1 to 4094. 64 VLAN groups in maximum, Management VLAN

Quality of Service: Meets IEEE802.1p class of service, per port 4 priority queues, Layer 3 IPv4 TOS/DiffServ

Rate Control: Support ingress and egress packet filtering by different types of packet format combination.

Packet filter: 4 types of packet filter rule, All packets, Broadcast/ multicast/ unknown unicast packet, broadcast/ multicast packet or broadcast packet only

IGMP Snooping: Compliance with IGMP v1/v2 and IGMP Query mode. Maximum IGMP groups up to 256

Timer: Support Simple Network Time Protocol (SNTP) to synchronize time from internet.

Firmware upgrade: TFTP firmware upgrade.

Port Mirror: TX/RX only, both of TX and RX packets

System Log: Provides 1000 entries for system or remote log server

E-mail Warning: SMTP warning by pre-defined events

Network Redundancy

Super Ring: The Super Ring function supports network recovery time less than 20ms with 250 entities, and also compatible with JetNet 3500, JetNet 4000 and JetNet 5010G

Coupling Ring: Provides the ability to couple 2 super rings

Dual Homing: Provides the ability to link Super ring and RSTP with higher level switch

Spanning Tree: IEEE802.1D Spanning Tree
 IEEE802.1w Rapid Spanning Tree

Interface

Number of Ports: 6 x 10/100Base-TX with Auto MDI/MDI-X, Auto-Negotiation functions. 2 x 100Base-FX

Connectors:

10/100TX: 6 x RJ-45

100Base-FX: 2 x SC connectors for Multi-mode or single mode fiber

Terminal Block: 6-pin for 2 x power input and 1 relay alarm output

DC power Jack x 1

Cables: CAT-3, CAT-4, CAT-5 unshielded twisted pair or shielded twisted pair cable. The Link distance is 100 meters in maximum

Fiber Cable:

50/125um or 62.5/125 multi-mode fiber, 2KM (JetNet 4508f-m)

8/125um or 9/125um single mode fiber, 30KM (JetNet 4508f-s)

Fiber Transceiver:

JetNet 4508f-m

Wave-length:1310nm

Tx Power:-19~-14dBm(Min.)

Rx Sensitivity:-31~-14dBm(Max.)

Link Budget:12dBm

JetNet 4508f-s

Wave-length:1310nm

Tx Power:-15~-8dBm(Min.)

Rx Sensitivity:-34~-8dBm(Max.)

Link Budget:19dBm

Diagnostic LED:

Per system: Power (green) x 3, Ring Master (green) x 1, Alarm (red) x 1

Per RJ-45 port: Link (green on)/Activity(green blinking), Full duplex (Yellow on)/Collision (Yellow blinking)

DIP Switch: 1 x 9-pin DIP Switch

DIP switch #1 ~#8:Port Link Down Alarm Enable (On)/Disable(Off)

DIP switch #9:Ring Master Enable(On)/Disable(Off)

Relay Alarm: Dry Relay output with 1A@24V ability. The relay can be enable/disable by software configuration

Power Requirements

System Power: 2 power input by terminal block

Input Voltage: DC 24V (12~48V) with Reverse Polarity Protection

Power Consumption: 9 Watts @ DC 24V

Mechanical

Installation: DIN-Rail mount or Wall Mount

Case: IP-31 grade aluminum metal case

Dimension: 135mm(H) x 53mm (W) x 105mm (D) (without DIN rail clip)

Weight: 1.11kg with package

0.735kg without package

Industrial Ethernet Switch

Environmental

Operating Temperature: -10 ~ 70°C
Operating Humidity: 5% ~ 95%, (non-condensing)
Storage Temperature: -40 ~ 85°C
Hi-Pot: 1.2KV for all ports and power

Regulatory Approvals

EMI: FCC Class A, CE/EN55022.
EMS: EN61000-4-2, EN61000-4-3, EN61000-4-4,

EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11

Safety: CE/EN60950, UL/cUL60950

Shock: IEC60068-2-27

Vibration: IEC60068-2-6

Free Fall: IEC60068-2-32

MTBF: 315,109 Hours, MIL-HDBK-217F GB

Warranty: 5 years

Ordering Information

JetNet 4508f-m Industrial 8-port Managed Fast Ethernet Fiber Switch, 2 SC/Multi-mode, 2KM

Includes:

- JetNet 4508f-m
- Wall mount panel
- Quick Installation Guide
- CD User manual

JetNet 4508f-s Industrial 8-port Managed Fast Ethernet Fiber Switch, 2 SC/Single-mode, 30KM

Includes:

- JetNet 4508f-s
- Wall mount panel
- Quick Installation Guide
- CD User manual

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SFP Module

Din Rail
Power Supply