

# JetNet 4005 / 4008

## Industrial 5 / 8-port Web-Managed Fast Ethernet Switch



- 5/8-port 10/100 TX Web-Managed Fast Ethernet Switch
- 3.2Gbps Switch Fabric with excellent data exchange performance
- Super Ring technology, back up system recovery time less than 20ms
- IGMP snooping v1/v2, VLAN, QoS, Rate control for network management
- Web-based configuration
- Support 1.2KV Hi-Pot isolation protection
- Redundant power input DC 12~48V
- Fault relay alarm
- Aluminum case with IP-31 grade protection
- DIN-Rail/Wall-Mounting/Desktop Installation
- -20~70°C operating temperature for hazardous environment application

### Overview

The JetNet 4005/4008 are 5/8-port 10/100TX Industrial Web-Managed Fast Ethernet Rail Switch with excellent software features including port control, port status, VLAN, Port Mirror, IGMP snooping with query, Quality of Service, Simple Network Time Protocol (SNTP), DHCP Client, STP/RSTP and Super Ring.

One of the main challenges in industrial automation applications is to ensure permanent uptime in the system. To meet this requirement, JetNet 4005/4008 provides Super Ring mechanism which has 20ms

recovery time - faster than RSTP. JetNet 4005/4008 has a built-in relay output for port and power outage alarms. The fault relay alarm will inform you whenever there is any port link down. Just move up the DIP switch and the fault relay alarm will be functioning!

To be operated in a harsh operating environment, JetNet 4005/4008 are equipped with dual power inputs with redundancy and rigid aluminum case with excellent heat radiation for -20~70°C environment operating temperature.

### Web Management for Easy Configuration & Non-stop Super Ring

Through the versatile and User-friendly interface configuration of VLAN, QoS, IGMP and event warning are not only to made easy, but also save 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 is failed, the 2nd path will be recovered within 20ms which gives you fault-tolerant connection.

## High-Speed Transmission & Fault Relay Output

Excellent data transmission performance is provided for you. No traffic will be delayed with the transmission rate up to 3.2Gbps. One relay output is an important feature to let you

know when there is any event of port link down. Just move up the DIP switch, the fault relay alarm will be functioning!

## 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

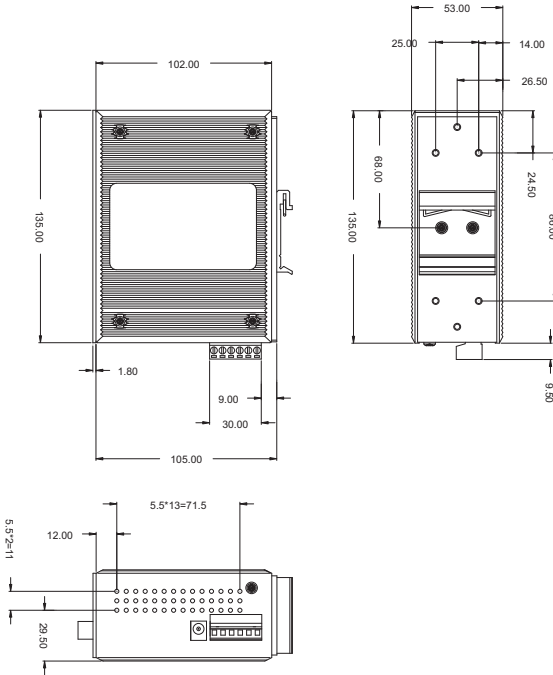
your power continuity. JetNet JetNet 4005/4008 series can be easily wall mounted or mounted directly on DIN rail.

## Hazardous Environment Application & True Reliability

The IP31 rigid aluminum flat casing and wide operating temperature ensures reliable operation in harsh environments. 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 4005/4008 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, IEEE802.3x flow control  
 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:** 14,880pps for Ethernet and 148,800pps for Fast Ethernet and transfer packet size from 64 to 1522Bytes

**MAC Address:** 2K MAC

**Packet Buffer:** 1Mbits

### Management

**Configuration:** Web browser. TFTP update, configuration backup/restore, DHCP client, warm reboot, reset to default, Admin password, Port Speed/Duplex control, status and statistics

**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

### Network Redundancy

**Super Ring:** Recovery time less than 20ms and compatible with JetNet 3500, JetNet 4500 and JetNet 5010G series.

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

### Interface

**Number of Ports:** 5/8 x 10/100Base-TX with Auto MDI/MDI-X, Auto-Negotiation functions

**Connectors:** RJ-45

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

**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:** JetNet 4005/4008: 1 x 6/9-pin DIP Switch  
 DIP switch #1 ~#5/8:Port Link Down Alarm Enable (On)/Disable(Off)

DIP switch #6/9:Ring Master Enable(On)/Disable(Off)

**Relay Alarm:**Dry Relay output with 1A@24V ability.

### Power Requirements

**System Power:** 2 power input by terminal block

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

#### Power Consumption:

JetNet 4005: 5 Watts @ DC 24V

JetNet 4008: 7 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:** 1.1kg with package, 0.725kg without package

### Environmental

**Operating Temperature:**-20 ~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:

JetNet 4005: 305,482 Hours

JetNet 4008: 319,175 Hours

MIL-HDBK-217F GB standard

**Warranty:** 5 years

## Ordering Information

**JetNet 4005 Industrial 5-port Web-Managed Fast Ethernet Switch**

**JetNet 4008 Industrial 8-port Web-Managed Fast Ethernet Switch**

Includes:

- JetNet 4005 / 4008
- Wall mount panel/Quick Installation Guide