

JetNet 3008f Industrial 8-port Fast Ethernet Fiber Switch



CE FC ~~RoHS~~

Dual Fiber QoS Alarm Dual 10~60VDC 1.5KV Hi-Pot

- 6 10/100 Base TX Ports plus 2 Fast Ethernet Fiber ports
- Supports Multi-mode 2KM, Single-mode 30KM
- Compact size with full power redundancy
- 2.0Gbps Switch Fabric with excellent data exchange performance
- QoS for packet forwarding precedence
- Broadcast storm packet filtering
- Port and power event alarm
- Dual DC10~60V power inputs
- Support 1.5KV Hi-Pot isolation protection
- Aluminum metal case with IP31 grade protection
- Operating temperature -10~70°C (JetNet 3008f) and -40~75°C (JetNet 3008f-w)

Overview

The JetNet 3008f is an 8-port Fast Ethernet switch designed with 6 RJ45 fast Ethernet copper and 2 fast Ethernet fiber ports of multi-mode or single-mode fiber optic cables as well as with enhanced design specifications, including wider operating temperature and power input range to best fit in long distance heavy industrial field applications. It is equipped with 2.0Gbps High performance switching engine with packet forwarding and filtering mechanism to fulfill higher performance industrial data communication requirements in field site deployments. The graceful packet forwarding

ability enables the JetNet 3008f to handle from 64 to 1522 bytes packet sizes into 2 forwarding priority queues which is compliant with IEEE 802.1p Class of Service for providing best data forwarding performance. In addition, to ensure best network performance, both broadcast storm filtering and flow control functions can ensure your data traffic delivery to destination without traffic congestion. The combination of enhanced network features and rugged specs make the JetNet 3008f become your best entry-level networking solution for extended distance industrial deployments.

Fiber Optic Port Options for Long Distance Requirement

To avoid interference as well as to extend your network coverage, in addition to 6 Fast Ethernet copper ports, JetNet 3008f is equipped with 2 100Mbps fiber

uplink ports, supporting multi-mode fiber for 2KM or single-mode for 30KM distances, in order to achieve stable far-end transmission.

Reliable Power System Design

In order to operate under harsh environment of industrial sites, JetNet 3008f is designed with redundant wide power input 10~60VDC range as well as auto polarity

reverse function to ensure the switch's capability of transmitting data under poor DC power sourcing.

Specification

Technology

Standard:

IEEE 802.3 10Base-T Ethernet
 IEEE 802.3u 100Base-TX /100Base-FX Fast Ethernet
 IEEE 802.3x Flow Control and Back-pressure
 IEEE 802.1p Class of Service (CoS)

System Performance

Switch Technology: Store and Forward Technology with 2.0Gbps Switch Fabric

System Throughput: 1.49 Mega packets per second, 64 bytes packet size

14,880pps for 10Base-T

148,800pps for 100Base-TX/100Base-FX

(pps: Packet Per Second)

Transfer packet size: 64 bytes to 1522bytes (includes 1522 bytes VLAN Tag)

MAC Address: 2K MAC address table with auto learning

Packet Buffer: 448Kilo bits shared memory for packet buffer

Relay Alarm Output: Dry Relay output with 0.5A /24V DC ability

Broadcast Storm Control: Default enabled.

Traffic threshold: 200 packets/ Sec. @100Mbps; 20 packets/ Sec. @ 10Mbps

Class of Service: Provides 2 packet forwarding Queues: High Queue (4~7), Low Queue (0~3)

Quality of Service: Default Enabled. Supports VLAN tag priority and IPv4 packet precedence

Event alarm relay: Provides port and power event alarm; Enabled by 9-PIN Dipswitch

Interface

Enclosure Port: 6 Fast Ethernet RJ-45

Duplex SC: 2 ports for multi-mode or single-mode fast Ethernet fiber

Alarm relay & Power input: 6-pin removable terminal block

Cables: 10Base-T: 2-pairs UTP/STP Cat. 3, 4, 5 cable, EIA/TIA-568B 100-ohm (100m)

100 Base-TX: 2-pairs UTP/STP Cat. 5 cable, EIA/TIA-568B 100-ohm (100m)

100Base-FX: Multi-mode (50/125um, 62.5/125um) fiber cable /2KM , Single-mode (8/125um, 9/125um, 10/125um) fiber cable/ 30KM

Fiber Transceiver

JetNet 3008f-m V3

Wave-length:1310nm

Tx Power: -14 ~-20dBm (Min.)

Rx Sensitivity:0~-31dBm (Max.)

Link Budget: 11dB

JetNet 3008f-s V3

Wave-length:1310nm

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

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

Link Budget:19dB

System Diagnostic LEDs

System: Power status (Green): On (power is on applying)

Alarm Output (Red): On (Output conductor is formed as a close circuit)

Ethernet port:

RJ-45: Link (Green on) / Activity (Green blinks)

100Mbps Link (Yellow on)/ 10Mbps Link (Yellow off)

100Mbps Fiber: Link(Green on)/ Active (Green blinks)

Power Requirements

System Power: 2 x Redundant power input with polarity auto reverse protection

Power Input Range: DC 24V (10~60V)

Power System Type: Positive or Negative power source

Power Consumption: 6.0 Watts / DC 24V ; Inrush current:62A @ DC 60V

Mechanical

Installation: DIN-Rail mount

Case: Aluminum metal case with IP31 grade protection

Dimension:

55 (W) x 120 (H) x 108 (D) / with DIN Rail Clip

55 (W) x 120 (H) x 99 (D) / without DIN Rail Clip

Weight: 0.575kg

Environmental

Operating Temperature: -10~70°C (JetNet 3008f)

-40~75°C (JetNet 3008f-w)

Operating Humidity: 0% ~ 95%, (non-condensing)

Storage Temperature: -40 ~ 85°C

Hi-Pot Insulation: AC 1.5KV for Port-Port / Port-Case/ Port-power , DC 1.5KV Power-Case

Regulatory Approvals

EMI:

CISPR 16-1-2/ 16-2-1/ 16-2-3 / 22

FCC Part 15 Subpart B Class A, ANSI C63.4

Heavy Industrial IEC/EN61000-6-4

EMS:

Heavy Industrial IEC/EN 61000-6-2

IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4,

IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8

Free Fall: IEC60068-2-32 with package ^{Note-1}

Warranty: Global 5 years

Note-1: Korenix's internal testing

Ordering Information

JetNet 3008f Industrial 8-port Fast Ethernet Fiber Switch, -10~70°C Op. Temp.

JetNet 3008f-w Industrial 8-port Fast Ethernet Fiber Switch, -40~75°C Op. Temp.

Includes:

- JetNet Switch with DIN rail clip
- Quick Installation Guide