# Specification

## Technology

Standard: IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX/FX IEEE 802.1p Class of Service IEEE 802.3af Power Over Ethernet(PoE) IEEE 802.3at High Power PoE IEEE 802.1D Spanning Tree IEEE 802.1w Rapid Spanning Tree

# Performance

#### Switch Technology:

Store and Forward Technology with 3.2Gbps wire-speed non-blocking Switch Fabric

System Throughput: 1.785Mpps

MAC Address: 2000

Packet Buffer: Embedded 1Mbits shared buffer

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

PoE Technology: End-Span wiring architecture

PD classification detection, class ID 0~3 follow IEEE802.3af standard, and 30W High power deliver procedures for class ID 4.

Pin assignment: V+ (RJ-45 Pin 4,5), V- (RJ-45 Pin 7,8), TX (RJ-45 Pin 1,2), RX (RJ-45 Pin 3,6)

Protection: Provides over-current protection by PD class ID Management

**Management interface:** SNMP v1, v2c and v3, Web browser, JetView, and CLI Management

Management Security: 4 entries for web, telnet, SNMP management security

**SNMP MIB:** RFC 1213 MIBII, RFC 1493 Bridge MIB, RFC 1757 RMON MIB, RFC 2674 VLAN MIB, RFC 1643 Ethernet like MIB, RFC1215 Trap MIB, RFC 3621 Power Ethernet MIB, Korenix Private MIB

**SNMP Trap:** Provides Cold start, Warm start, Port event, Power event, Authentication failure, PoE trap and Korenix private trap for proprietary functions

Firmware upgrade: TFTP, Local file and JetView

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

**Event Alarm Relay:** 1 1A @24V Dry Relay Contact output for port link down, PoE and System power events.

**Quality of Service:** Quality of Service determined by port, Tag and IPv4 Type of Service

**Class of Service:** IEEE802.1p class of service, with 4 priority queues

**DHCP:** Supports DHCP Cilent and DHCP Server function with specified IP exclusion and MAC binding function

**Timer:** Supports Network Time Protocol (NTP) to synchronize time from NTP Server

## VLAN: Port based VLAN

IGMP: Supports IGMP Snooping v1/v2/v3 and IGMP Query v1/v2

**Network Redundancy:** Supports Rapid Super Ring function for network redundancy with 5ms network recovery time; To inter-operate with other higher-level switches, JetNet 4706f provids Dual Homing II technology to conform with RSTP protocol.

JetNet 4706f also conforms with IEEE802.1D 2004 edition for RSTP and STP standand protocoes

**PoE Port Control:** Supports user configuration for PoE enable disable, or based on schedule

**Power Limit Control:** The control mode supports IEEE802.3af standard, Manual and Ultra mode for 30W Hi-power. The maximum DC power delivery on each PoE port is 12.9W@DC 24V input or 30W @ DC55V input

**PoE Scheduling Control:** Each PoE port can be activated and powered scheduling with different rule. It supports weekly scheduling by hourly basis.

**LPLD function**: The Link Partner Line Detect function (LPLD) is available on PoE ports. With the LPLD function, the PoE port can keep attached PD alive

**IP Security:** IP security to prevent unauthorized access **Port Security:** Port security to assign authorized MAC to specifc port

# Interface

Number of Ports: 4 x 10/100Base-TX with PoE Injector 2 x 100Base-FX ports 1 x RS-232 Console Connectors: 10/100TX: RJ-45 100Base-FX: SC Console: RJ-45 Power & Relay Alarm: 6-pin Terminal Block Power Consumption: 8 Watts @ 50V (Maximum) without PD loading Cable: 10Base-T: 4-pair UTP/STP Cat. 3, 4, 5 cable, EIA/TIA-568 100-ohm(100m) 100Base-TX: 4-pair UTP/STP Cat. 5 cable,

EIA/TIA-568 100-ohm(100m)

100Base-FX: Multi-mode 50~62.5/125um; Single-mode

8~10/125um Fiber Transceiver:

JetNet4706f-m, Multi-mode: 2KM max. distance Wave-length: 1310nm Min Tx Power:-19dBm Max Tx Power:-14dBm Min Rx Sensitivity:-30dBm Link budget:11dBm JetNet 4706f Industrial 6-port Managed PoE Fiber Switch



JetNet 4706f-s, Single-mode: 30KM max. distance Wave-length:1310nm Max Tx Power:-8dBm Min Tx Power:-15dBm Min Rx Sensitivity:-34dBm Link budget:19dBm Rest Button: For system reboot and factory default setting **Diagnostic LED:** Power LED: Power 1/Power 2 (Green) Fast Ethernet Port 1~4: Link(Green)/ Activity (Green blinking), PoE Powering (Yellow on), PoE Detect (Yellow blinking), PoE Disable (Yellow off), PoE Powering failure (Yellow fast blinking) Fast Ethernet Port 5,6: Link(Green)/Activity (Green blinking) Alarm (Red): Port link down or power failure occurred **Power Requirements** System Power: Support positive or negative power system with DC 24~55V power input range and polarity reverse

protection
Power Consumption:

8 Watts @ 50V (Maximum) without PD loading

# Mechanical

Installation: DIN-Rail mount or desktop or wall mount Case: IP-31 grade aluminum metal case

Dimension: 46.5 mm (H) x 174.8 mm (W) x 136 mm (D) without DIN-rail mount

#### Weight:

0.72 kg with package 0.65 kg without package

### Environmental

 $\label{eq:constraint} \begin{array}{l} \mbox{Operating Temperature: -10} \sim 60^\circ \mbox{C} \\ \mbox{Operating Humidity: 5\%} \sim 95\%, (non-condensing) \\ \mbox{Storage Temperature: -40} \sim 80 \ ^\circ \mbox{C} \\ \mbox{Storage Humidity: 5\%} \sim 95\%, (non-condensing) \end{array}$ 

# **Regulatory Approvals**

Safety: CE/EN60950 EMI: FCC Class A; CE/EN55022:2003 Class A CE/EN61000-3-2:2001 Harmonic Test CE/EN61000-3-3:1995 Flicker test **FMS** EN61000-4-2:1998, ESD EN61000-4-3:1998, RS EN61000-4-4:1995, EFT EN61000-4-5:1995 EN61000-4-6:1996, Shock: IEC60068-2-27 Vibration: IEC60068-2-6 Free Fall: IEC60068-2-32 MTBF: 272,306 Hours, MIL-HDBK-217F GB standard Warranty: 5 years

# Ordering Information

#### JetNet 4706f-m Industrial 6-port Managed PoE Ethernet Fiber Switch

Includes:

- JetNet 4706f-m, 4 PoE Injectors plus 2 100Mbps fiber port, 2KM/SC connector
- Quick Installation Guide
- RS-232 Serial cable
- CD User Manual
- DIN Rail Mount Kit

#### JetNet 4706f-s Industrial 6-port Managed PoE Ethernet Fiber Switch

Includes:

- JetNet 4706f-s, 4 PoE Injectors plus 2 100Mbps fiber port, 30KM/SC connector
- Quick Installation Guide
- RS-232 Serial cable
- CD User Manual
- DIN Rail Mount Kit

# Optional Accessories

- 48VDC Din-Rail Power: DR-75-48
- 48VDC PoE Splitter: PD1205