

JetNet PoE 4706

Industrial 6-port Managed PoE Ethernet Switch

- 2 10 / 100 TX ports and 4 10 / 100 TX Power Over Ethernet ports
- IEEE802.3af Power Over Ethernet compliance
- Scheduling PoE control on weekly and hourly bases
- Supports PoE 48V and 24V input/output and up to 30W per port hi-power solution
- Active Powered Device status detection and auto reset function (LPLD)
- Patented Rapid Super Ring technology (RSR), back up system recovery time less than 10ms and up to 250 sets
- SNMP v1 / v2c / v3, IGMP snooping v1/v2, RMON, LACP, VLAN, QoS, CPU Rate control, Port trunk, etc.. for network management
- Access IP/MAC address, SSL and SSH for Network Security
- Built in hardware watchdog timer for auto reset failed system
- Aluminum case with IP-31 grade protection
- -20~70°C operating temperature for hazardous environment application



Overview

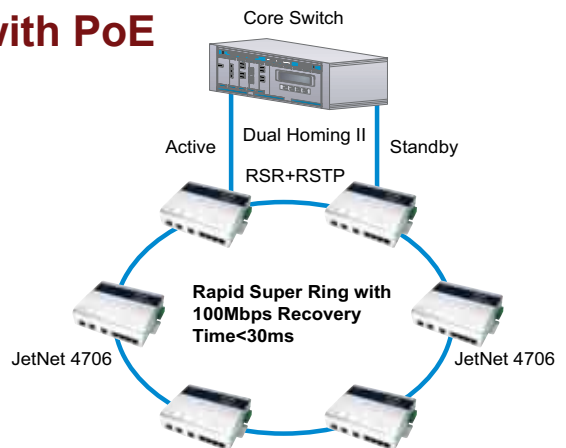
The JetNet PoE 4706 is a 6-port Fast Ethernet Industrial Managed Switch with 4 10/100TX ports Power Over Ethernet injectors and 2 10/100TX uplink ports. The JetNet PoE 4706 is compliant with IEEE 802.3af Power Over Ethernet standard and can also provide 30W PoE high power forwarding ability. To apply for both standard and non-standard power source systems, the JetNet 4706 is equipped with a dual-mode PoE powering mechanism,

24V or 48VDC.

The JetNet 4706 PoE is able to detect different input power voltages and to perform powered devices detection, classification, powering and disconnection processes automatically. The dual-mode PoE powering is specially suitable for Transit System with DC24V power system, or any application lacking the DC48V power source.

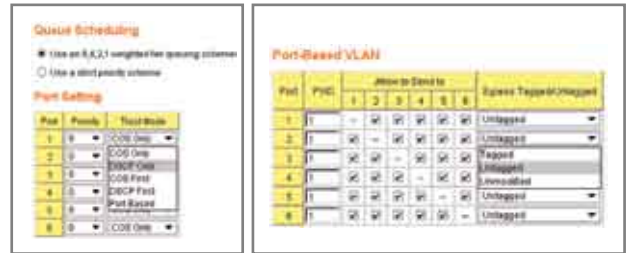
A Non-Stop Transmission Network with PoE Function- R.S.R. & Dual Homing II

The additional 2 100Mbps Fiber ports allow users to extend network infrastructure for any uplink or connection as a redundant Ethernet ring architecture, Rapid Super Ring (RSR). The RSR function provides network redundancy with less than 30ms recovery time when main path is disconnected. To integrate with higher level switch, JetNet 4706 implements Dual Homing II function which merges RSR and RSTP Rapid Spanning Tree Protocol in one redundant port.



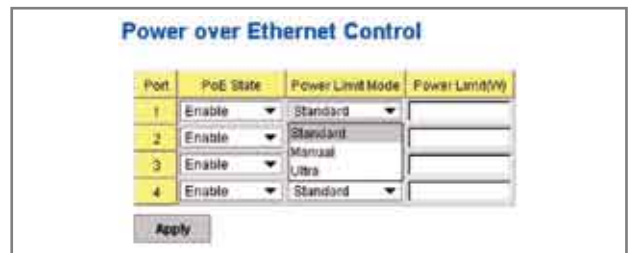
Quality of Service & Port Based VLAN

To enhance transmission performance, the JetNet PoE 4706 adopts a QoS function with 8:4:2:1 Weighted Round-Robin forwarding scheme and port based VLAN function. These features assure the real time service can be processed in a short forwarding latency, video streaming in high priority and the real time security access.



Power Limit Control

The JetNet PoE 4706 also implements an excellent PoE power limit control mechanism, such as PoE port disable/enable, power limit mode selection for IEEE 802.3af standard, manual configuring power budget and ultra power for high-power powered device.



Weekly Scheduling PoE Power Control

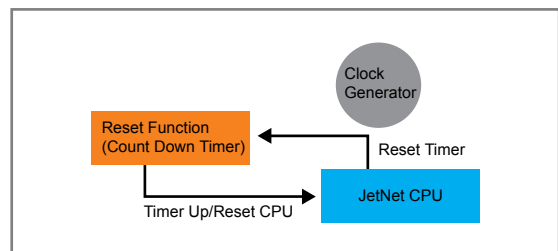
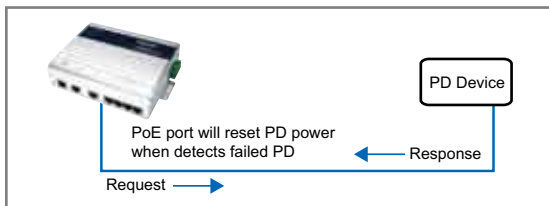
To provide an easy, smart and user friendly PD powering control, the JetNet PoE 4706 implements an UPS-like scheduling control for PoE power delivery. It provides an user friendly weekly scheduling control by hourly basis. Each port can be configured with different rules. This feature can also save power and meets economic resource management requirement.



Smart PD Status Detection Function - LPLD

Smart PD Status Detection Function -LPLD (Linked Partner Line Detection). The JetNet PoE 4706 provides an "In Band Detection" solution to save your time in PD maintenance. It executes PD live check continuously by

keeping polling the PD's status. If PD is failed or unstable, the JetNet PoE 4706 will reset the PD's power by triggering the cold start process of PD.

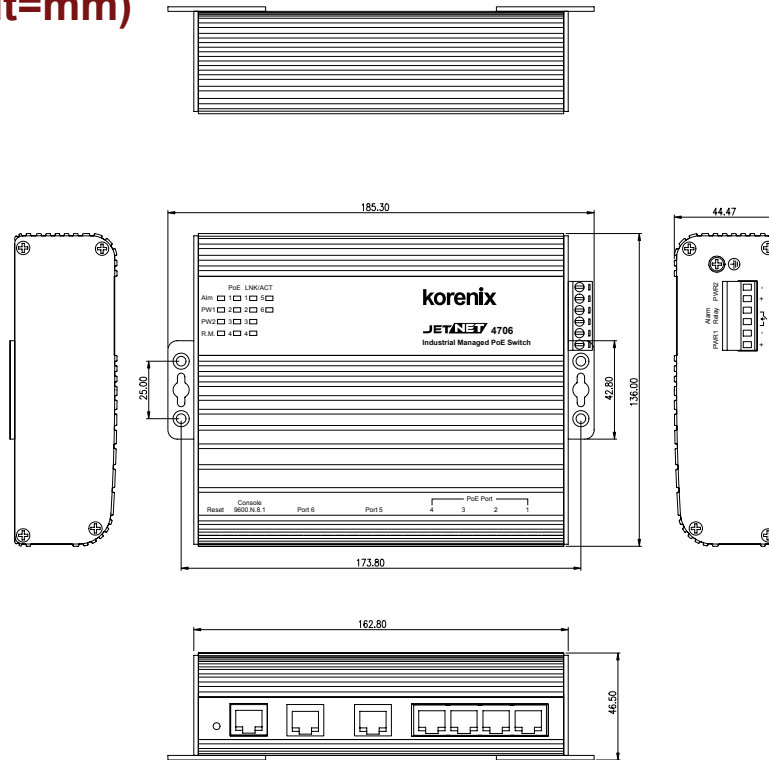


Built in WatchDog Timer & Network Management Features

In industrial networking applications, the reliability is among the must requirements to be fulfilled. To deliver a real non-stop operating system for your application, the JetNet PoE 4706 is built in a real time hardware watch dog timer to assure system reliability. JetNet PoE 4706 also supports comprehensive and user

friendly management interfaces, such as SNMP v1/v2/v3, RMON, Web interface, Telnet, Cisco-like CLI via RS-232 console. JetNet PoE 4706 is the best choice to build up an intelligent, power management and cost saving IP surveillance infrastructure.

Dimension (Unit=mm)



Specification

Technology

Standard:

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-T
- IEEE 802.1p Class of Service
- IEEE 802.3af Power Over Ethernet
- 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

Management interface: SNMP v1, v2c and v3, Web browser and Console Management

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

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

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

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

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

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

VLAN: Port based VLAN

IGMP: Supports IGMP v1/v2C protocol with IGMP Snooping and Query functions

Network Redundancy: Supports Rapid Spanning Tree function for network redundancy with 10ms network recovery time; To inter-operate with other higher level switches, JetNet 4706 provides Dual Homing II technology to conform with RSTP protocol.

JetNet 4706 also conforms with IEEE802.1D 2004 edition for RSTP and STP standard protocols

Event Alarm Relay: 1 Dry Relay Contact output for port link down, PoE and System power events.

Supports 1A @24V

Firmware upgrade: TFTP and HTTP firmware upgrade

PoE Port Control: Supports user configuration for PoE enable/disable

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 @ DC50V 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

Industrial PoE Ethernet Switch

Interface

Number of Ports:

4 x 10/100Base-TX with PoE Injector
2 x 10/100Base-TX ports
1 x RS-232 Console

Connectors:

10/100TX: RJ-45
Console: RJ-45
Power & Relay Alarm: 6-pin Terminal Block

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

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, Cat.5E/Cat.6 cable,
EIA/TIA-568 100-ohm(100m)

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 24~50V 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:

45.5 mm (H) x 185.3 mm (W) x 136 mm (D) without DIN-rail clip

Weight:

0.72 kg with package
0.65 kg without package

Environmental

Operating Temperature: -20°C ~70°C

Operating Humidity: 5% ~ 95%, non-condensing

Storage Temperature: -40°C ~ 80 °C

Storage Humidity: 5%~ 95%, non-condensing

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

EMS: EN61000-4-2:1998, ESD Testing, Level 3(Contact +/- 6KV, Air +/-8KV) with Criterion performance A, port to port (data to data), port to power (data to power)

EN61000-4-3:1998, RS testing, Level 3 (10V/m) with criterion performance A

EN61000-4-4:1995, EFT testing, Level 3 (Power supply: +/-2kV/5Khz; I/O: +/- 1Kv,5Khz), with criterion performance A

EN61000-4-5:1995, Surge test, Level 3 (L-N: +/- 2Kv), with criterion performance A

EN61000-4-6:1996, CS testing, Level 3, with criterion performance A

Shock: IEC60068-2-27

Vibration: IEC60068-2-6

Free Fall: IEC60068-2-32

MTBF: 324,345 Hours, MIL-HDBK-217F GB standard

Warranty: 5 years

Ordering Information

JetNet PoE 4706 Industrial 6-port Managed PoE Ethernet Switch

Includes:

- JetNet PoE 4706, 4 PoE Injectors plus 2 10 / 100TX ports
- Quick Installation Guide
- RS-232 Serial Cable
- CD User Manual
- DIN Rail Mount Kit