

## JetNet PoE 3706

### 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
- Supports PoE 48V and 24V input/output and up to 30W per port hi-power solution
- Active Powered Device status detection
- Aluminum case with IP-31 grade protection
- -20~70°C operating temperature for hazardous environment application



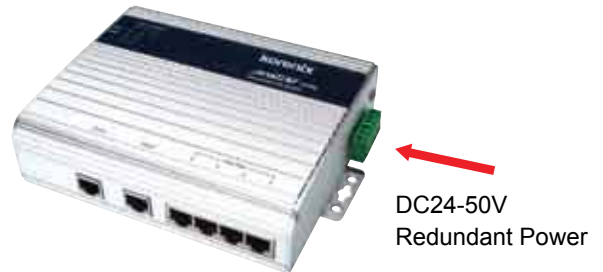
### Overview

The JetNet PoE 3706 is a 6-port 10/ 100TX Fast Ethernet Industrial PoE Switch with 4 ports Power Over Ethernet injectors. The JetNet PoE 3706 is compliant with IEEE

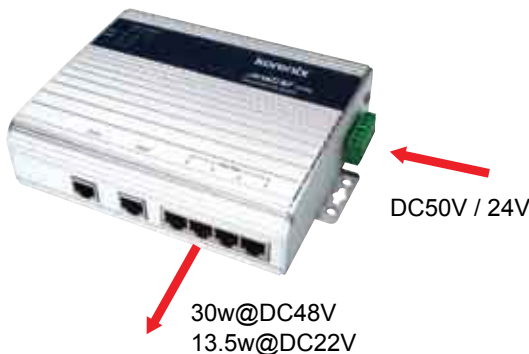
802.3af Power Over Ethernet standard and supports 30W power forwarding ability per PoE port.

### DC24V /48V PoE System

To apply for both standard and non-standard power source systems, the JetNet PoE 3706 is equipped with a dual-mode PoE powering mechanism, 24V or 48VDC. The JetNet PoE 3706 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 transportation system with DC24V power system, or any application lacking the DC48V power source.



### High Power Forwarding Ability



In IEEE802.3af Power over Ethernet standard, it specified 15.4w power budget for PD system. However, 15.4w is not enough for some applications. The JetNet PoE 3706 provides two models of PoE powering mechanism, IEEE802.3af and High power pre-standard IEEE802.3at for 30W power budget. To recognize the PD classification ID, the JetNet PoE 3706 is equipped with a powerful micro-processor for power detection, classification, powering and disconnection scheme. The JetNet PoE 3706 can power PD with different PD classification ID. It can deliver totally 120W output in maximum with DC50V power input for ID number four. For the IEEE802.3af standard PD, the JetNet PoE 3706 also supports maximum 61.4W power forwarding ability with DC 48V power.

## Quality of Service with WRR

The additional 2 10/100TX ports allow users to make uplink connections for extending network infrastructure. In order to obtain superior transmission performance, JetNet PoE 3706 enables QoS function with 8:4:2:1 WRR forwarding mechanism. This feature ensures real time service could be processed with high priority and without any forwarding delay. Moreover, the JetNet PoE 3706 has an IP-31 aluminum case to provide heat-radiation and mechanical protection under harsh operating temperature.

## Specification

### Technology

#### Standard:

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

### Performance

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

**System Throughput:** 1.78Mpps

**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

**Quality of Service:** Meets IEEE802.1p, per port provides 4 priority queues with WRR packet forwarding mechanism

### Interface

**Number of Ports:** Four 10/100Base-TX with PoE injector  
Two 10/100Base-TX Uplink Ports

**Connectors:** 10/100TX: RJ-45  
Power: 6-pin Terminal Block

**PoE Technology:** End-Span wiring architecture  
Provides PD classification detection, class ID 0~3 follow IEEE802.3af standard, and class 4 for 30W High power deliver procedures.

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: Over-current protection by PD class

**Power Budget Control:** Supports IEEE802.3af PD classification mechanism for 15.4W and class ID number 4 for IEEE802.3at High-power pre-standard 30W

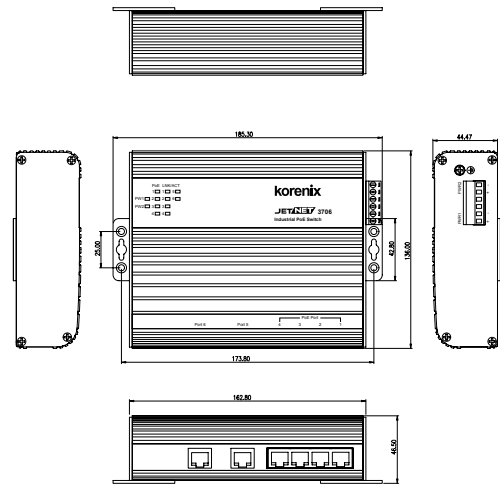
## Ordering Information

### JetNet PoE 3706 Industrial 6-port Managed PoE Ethernet Switch

Includes:

- JetNet PoE 3706, 4 PoE Injectors plus 2 10 / 100TX ports
- Quick Installation Guide
- CD-User Manual
- DIN Rail Mount kit

## Dimension (Unit=mm)



The maximum DC power delivery on each PoE port is 12.9W@DC 24V input or 30W @ DC 50V input with maximum 0.615A current output.

**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)

### Power Requirements

**System Power:** Supports positive or negative power system DC 24~50V with reverse polarity protection

**Power Consumption:** 8Watts @ 48V (Maximum) without PD loading

### Mechanical

**Installation:** DIN-rail mount or Wall mount or Desktop

**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:**

0.70kg with package

0.55kg 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

**EMS:** EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6

**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