

JetNet 3705

Industrial 5-port Power Over Ethernet Switch

- Four 10/100 TX Ports with Embedded PoE Injector
- One 10/100FX Up-link Port
- 15.4W Full Power Delivery per PoE Port
- Relay Alarm for Port Failure
- Terminal Block Power Input for Industrial Application.
- DC Jack Power Input for External Power Adapter
- End-Point PoE Architecture
- Easy Configuration by DIP Switch
DIN-Rail/ Wall-mounting and Desktop
- Installation



Overview

Industrial PoE switches that deliver power over UTP or STP cable not only save significant cost and space, but also increase power utilization and centralize power management. The JetNet 3705 equips with 4 PoE injector switch ports, with each port delivering power up to 15.4 watts in maximum, and one 10/100Base TX Up-link port transferring data to the remote end. The JetNet 3705 conforms to IEEE 802.3af Power over Ethernet (PoE) standard. The Power Over Ethernet technology can power up PoE enabled powered devices in full capability, e.g. IP surveillance camera, wireless Access Point, VoIP phone set, POS system, industrial sensors, controllers and security card reader. Using an external 48VDC

power supply, JetNet 3705 enables power and data transmission to be pumped out over the same UTP or STP cable in the four PoE ports.

To meet the requirements for harsh environment, JetNet 3705 uses a robust aluminum case, offering IP30 protection, and supports one alarm relay output. The JetNet3705 provides standard industrial terminal block for the power and relay alarm contact output to alarm any port break or power failure. For the user's convenience, it also provides a DC jack for the traditional AC/DC power adapter.

Industrial-grade IEEE 802.3af Compliant Power Source Switch

JetNet3705 is in compliance with IEEE 802.3af standard and supports Power Sourcing Equipment (PSE) function. It delivers power through the spare pairs (4, 5, 7, 8) of standard Ethernet CAT5 cable and transmits data through the traditional pairs (1, 2, 3, 6). The JetNet3705 PoE ports provide PoE auto

detection of the link partner to deliver the exact power to the PD. If the link partner is not a PD or the link cable is short, or the device is broken, it will execute a series of standard procedures to avoid sending out a huge power to damage the linked device.

Secure Power Protection

JetNet 3705 is designed to endure harsh working environment and severe operating temperature. To successfully deliver reliable power, JetNet 3705 builds in strong protection against abnormal working conditions including 2KV power surge protection from the power input and over-voltage protection to keep PoE output voltage in

between DC 44 ~ 57V, 350mA over-load current and 450 mA short current protection. The JetNet 3705 PoE function is fully in compliance with IEEE 802.3af standard, therefore all PoE protection measures are put into practice in the JetNet3705 series.

Specifications

Technology

Standard:

IEEE 802.3 10Base-T Ethernet
 IEEE 802.3u 100Base-TX Fast Ethernet
 IEEE802.3x Flow Control and Back-pressure
 IEEE 802.3af Power Over Ethernet

Processing: Store and Forward architecture

Interface

Number of Ports:

5 x RJ-45 for 10/100 Base-TX, Auto MDI/MDI-X

Network 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)

LED Indicators:

Power x 3 (Green), Fault x 1 (Red)
 PoE x 4 (Green)
 Link/Activity x 5 (Green on / Green Blinking)@100Mbps,
 (Yellow on / Yellow Blinking)@10Mbps

Alarm:

Dry Relay output for port and power event alert

Performance

Transfer Rate:

14,880 pps for Ethernet 148,800 pps for Fast Ethernet

Transfer packet size: 64 bytes to 1522 bytes (with VLAN tag)

MAC Address: 1K MAC address table

Memory Buffer: 512K bits

Back-plane: 3.2 Gbps

Power Requirements

Power Supply:

Input Voltage:
 48VDC or -48VDC, dual inputs in terminal block connection
 AC /DC Power Adapter 48VDC/ 1.6A (option)
 Power input connector:
 Two Power inputs via the Terminal Block (12 ~24 AWG power cable)
 One DC jack for AC/D power adapter.
 Reverse Polarity Protection: Present

Power Consumption:

6.5Watts without PD loading
 70Watts with PD full loading

PoE Port :

Port 1~4
 Per port 15.4W ability.
 RJ-45 pin assignment: TX (3,6), RX (1,2), V+ (4,5), V-(7,8)

PoE Ports Output Voltage: 44 to 57VDC

DIP Switch:

Switch 1~5: Port 1~5 link down alarm Enable/Disable
 Switch 6: Power fault alarm Enable/Disable.

Mechanical

Installation: DIN-rail kit and wall mounting
Casing: IP-30 protection, Aluminum case, Fanless design
Dimensions: 33.8 mm (H) x 164.8 mm(W) x 108 mm (D)

Environmental

Operating Temperature:

General model: -10~70°C (14~ 158°F)
 Wide Operating Temp Model (-w): -40~80°C(-40~176°F)

Operating Humidity: 5% to 95% (Non-condensing)

Storage Temperature: -40 to 85 °C (-40 to 185°F)

Regulatory Approvals

EMI: FCC Class A, EN 55022 Class A

EMC:

EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5,
 EN61000-4-6, EN61000-4-8, EN61000-4-11

Safety: UL, cUL, EN 60950

Shock: IEC 60068-2-27

Free Fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Warranty: Global 5 years

Ordering Information

JetNet 3705 Industrial 5-port PoE Power Source Ethernet Switch

Includes:

- 4 x 10/100 Base-TX PoE Port, 1 x 10/100 Base TX
- Quick Installation Guide
- Documentation CD-ROM
- DIN-Rail mounting kit