

## JetNet 3705f

### Industrial 5-port Power Over Ethernet Switch

- Four 10/100 TX Ports with Embedded PoE Injector
- One 10/100FX Up-link Single-Mode / Multi-Mode Fiber 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 3705f equips with 4 PoE injector switch ports, with each port delivering power up to 15.4 watts in maximum, and one 10/100Base fiber Up-link port transferring data to the remote end. The JetNet 3705f 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 3705f 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 3705f uses a robust aluminum case, offering IP30 protection, and supports one alarm relay output. The JetNet3705f 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 Compliance Power Source Switch

JetNet3705f 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 JetNet3705f 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 executes a series of standard procedures to avoid sending out a huge power to damage the linked device.

### Secure Power Protection

JetNet 3705f is designed to endure harsh working environment and severe operating temperature. To successfully deliver reliable power, JetNet 3705f 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 JetNet3705f PoE function is fully in compliant 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  
 IEEE 802.3u 100Base-FX Fast Ethernet Fiber  
 IEEE802.3x Flow Control and Back-pressure  
 IEEE 802.3af Power over Ethernet

**Processing:** Store and Forward architecture

### Interface

#### Number of Ports:

4 x 10/100 Base-TX, Auto MDI/MDI-X, 1 x 100 Base-FX

#### 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)

#### Optical Cable:

SC(Multi Mode): 50/125um or 62.5/125um  
 SC(Single Mode): 9/125um  
 Wavelength: 1310nm(Multi mode/ Single mode)  
 Available distance: 2km(Multi-mode)/ 30km(Single mode)  
 Min. TX power: -19 dBm(Multi-mode)/ -15 dBm(Single mode)  
 Max. TX power: -14 dBm(Multi-mode)/ -8 dBm(Single mode)  
 Sensitivity: -31 dBm(Multi-mode)/ -34 dBm(Single mode)

#### 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 break and power fault

### 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

## Ordering Information

**JetNet 3705f-m Industria 5-port I PoE Power Source Ethernet Switch with one Multi-Mode 100Base-FX Includes:**

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

**JetNet 3705f-s Industrial 5-port PoE Power Source Ethernet Switch with one Single-Mode 100Base-FX Includes:**

- 4 x 10/100 Base-TX PoE Port, 1 x Single-Mode 30 KM 100 Base-FX Switch
- Quick Installation Guide
- Documentation CD-ROM
- DIN-Rail mounting kit

### 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  
 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