

# JetCon 1702

## Industrial 2-Port High Power PoE Injector



- 2-Port High Power 30W PoE Injector
- IEEE 802.3af / IEEE 802.3at Compliance
- Alternative-A Data pair power feeding (JetCon 1702-A)
- Alternative-B Spare pair power feeding (JetCon 1702-B)
- Gigabit High Speed Data Link
- Operating temperature -40~75°C

- Industrial Intelligent NMS
- Rackmount PoE Plus Switch
- Industrial PoE Plus Switch
- Industrial 12-24V PoE Switch
- Industrial PoE Switch
- Rackmount L3/L2 Switch
- Gigabit Managed Switch
- Managed Ethernet Switch
- Entry-level Switch
- Wireless Outdoor AP
- Embedded PoE/Router Computer (LINUX)
- Industrial Communication Computer (WIN/LINUX)
- Ethernet/PoE/Serial Board
- Ethernet I/O Server
- Media Converter**
- Serial Device Server
- SFP Module
- Din Rail Power Supply

### Overview

JetCon 1702 is an advanced and cost effective high power PoE injector; it applies power to Ethernet RJ-45 data pairs or spare pairs for the powered device (PD), JetCon is designed with IEEE 802.3 at and

IEEE 802.3af compliance. JetCon 1702 offers 2 channels PoE injectors which is very suitable for the remote wireless access, video surveillance applications where power is lack.

### High Speed Connection

The JetCon 1702 PSE interface support link speed up to 1000Mbps, and compliance with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX and IEEE 802.3ab 1000Base-T. With the high speed, wide bandwidth

connection, the mega pixel PoE IP Camera can be easily to be powering by the JetCon 1702 and connects to Central Gigabit Backbone Switch without video lag.

### Standardized PSE Design

The Power over Ethernet Technology is commonly used in surveillance and wireless access application. But most of PDs are powering by non-standard power injector which shipping with PDs. However, it is very convenience but not compatible with IEEE standard

and no mechanism protections. The JetCon 1702 is fully compliance of IEEE 802.3af/at standard, which provides the protections of cable short, over current, over voltage and under voltage to prevent damage the powered devices, such as PoE IP Camera and Wireless AP.

## Higher Electrical Magnetic Immunity

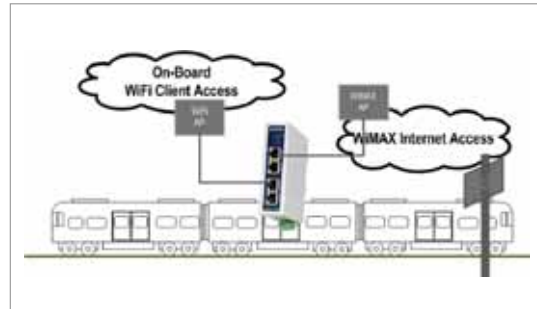
As the demands of surveillance and mobile communications are getting more and more, the Power over Ethernet is commonly deployed in IP surveillance / IP Camera and wireless access application and each device cover a certain area. It costs more if uses one multiple port Power over Ethernet Switch to approach power delivery. Thus, the JetCon 1702 offers a cost effective Power over Ethernet PSE solution that injects power into Ethernet cable to powering those PoE IP

cameras and Wireless devices. Besides, the JetCon 1702 is considered applications which may install at outside cabinet and must resist noise from neutral, such as spike, fast electrical transient or lightning. Therefore, the JetCon 1702 is designed to offer EMI and EMS ability for heavy industrial applications which bears to track side inquire, and passed military grade 15,000 watts transient and 5,000 watts spark testing at power interface. All above tests are refer to MIL-STD- 1275 to protect your devices.

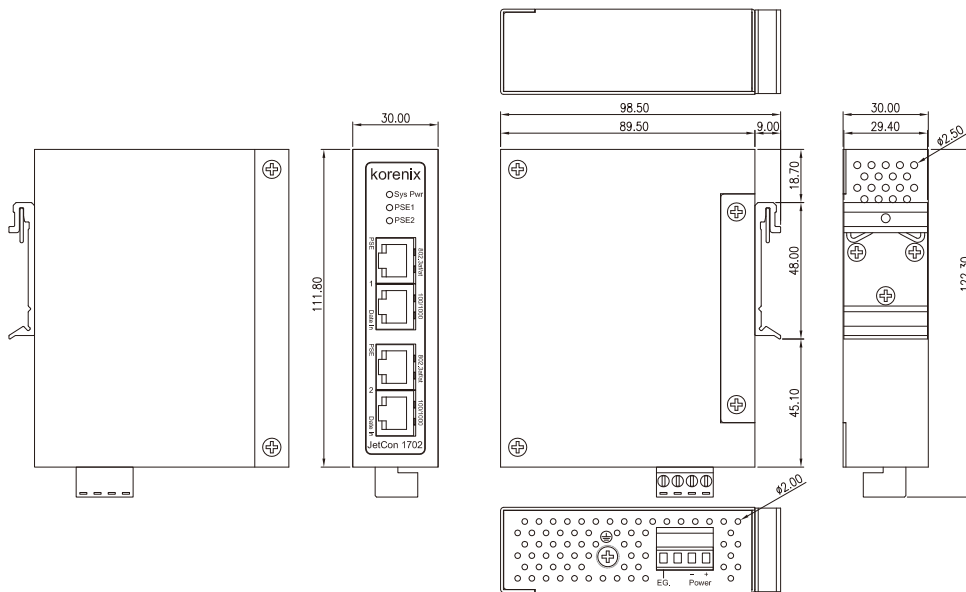
## Applications

On board passenger internet WiFi AP access through WiMAX mobile Roaming.

Two WiMAX access devices allocate at front and tail carriage, linked with train network bus. The JetCon 1702 supports 30W power budget for WiMAX, and 15W for WiFi AP.



## Dimensions (Unit = mm)



## Specification

### Technology

#### Standard:

IEEE 802.3 10Base-T  
 IEEE 802.3u 100Base-TX  
 IEEE 802.3ab 1000Base-T  
 IEEE 802.3af Power over Ethernet  
 IEEE 802.3at High Power PoE

### Performance

**PoE Operating Mode:** Power Sourcing Equipment (PSE) with Auto detection, classification, powering and disconnection.

#### PoE powering mode:

Alternative-A: JetCon 1702-A  
 RJ-45 (1,2):V-, RJ-45 (3,6):V+  
 Alternative-B: JetCon 1702-B  
 RJ-45 (4,5):V+, RJ-45 (7,8):V-

#### PoE Output Budget:

IEEE 802.3af: 15W @DC 48V, per port  
 IEEE 802.3at: 30W @ DC 53V, per port

#### PoE Disconnection:

DC disconnection  
**Protection:** PoE over temperature, Over current and Under/Over voltage protection  
 Over Current Protection (Icut): 600mA , IEEE 802.3at, 305mA  
 IEEE 802.3af

### Interface

**Data Port:** Data Port : Two RJ-45 connectors

**PSE Port:** Data and Power: Two RJ-45 connectors with PoE power output

**Power input Port:** 4-Pin removable Terminal Block Connector  
 2 conductors for DC input, 1 conductor for Surge protection

### System Diagnostic LEDs

#### System Power:

Sys Pwr : System power is on applying (Green on)  
**PSE:** PSE 1, PSE 2: PoE powering (Green on), PoE over current or cable short (Green slow blinking), PoE system over voltage or over temperature (Green fast blinking)

### Power Requirements

**System power:** DC 46~57V with polarity reverse protection

**Power Consumption:** JetCon 1702-A/ JetCon 1702-B (Maximum): 2W without PoE loading (Maximum)  
 JetCon 1702-A/ JetCon 1702-B (Maximum with PoE FullLoading): IEEE 802.3af 35.04W@DC48V, IEEE 82.3at 60.42W@DC53V, IEEE 802.3at 70.2W@DC 57V  
**Inrush Current:** 0.2A/ DC 46V, 0.224A/ DC 48V, 0.271A/ DC53V, 0.33A/ DC 57V

### Mechanical

**System Installation:** DIN Rail installation

**Case:** Steel Metal Housing with Ingress Protection – code 31

**Dimensions:** 111.8 mm(H) x 30mm (W) x 89.5mm (D)

**Weight:** 0.485 kg with package  
 0.335 kg without package

### Environmental

**Operating Temperature:** -40 ~75°C

**Operating Humidity:** 0% ~ 95% (non-condensing)

**Storage Temperature:** -40 ~ 80°C

**Storage Humidity:** 0%~ 95% non-condensing

### Regulatory Approvals

**EMC:** CE, FCC A, IEC/EN61000-6-2, IEC/EN61000-6-4

MIL-STD 1275 - Power port with DC48V source

**MTBF:** 498,000 Hours ,MIL-HDBK-217F

**Warranty:** 5 Years

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 Intelligent  
 NMS

Rackmount  
 PoE Plus  
 Switch

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Industrial  
 12-24V  
 PoE Switch

Industrial  
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Rackmount  
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Gigabit  
 Managed  
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Managed  
 Ethernet  
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Entry-level  
 Switch

Wireless  
 Outdoor AP

Embedded  
 PoE/Router  
 Computer  
 (LINUX)

Industrial  
 Communication  
 Computer  
 (WIN/LINUX)

Ethernet/PoE/  
 Serial Board

Ethernet  
 I/O Server

**Media  
 Converter**

Serial Device  
 Server

SFP Module

Din Rail  
 Power Supply

## Ordering Information

**JetCon 1702-A Industrial 2-Port High Power PoE Injector, A-Mode, -40~75°C**

**JetCon 1702-B Industrial 2-Port High Power PoE Injector, B-Mode, -40~75°C**

Includes:

- JetCon 1702-A / 1702-B
- DIN rail kit
- Quick Installation Guide