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℃

CE FC ⊠ RoHS

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 ofcable short, over current, over voltage and under voltage to prevent damage the powered devices, such as PoE IP Camera and Wireless AP.
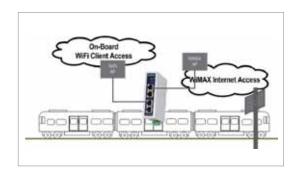
Higher Electrical Magnetic Immunity

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 cove 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 lighting. 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.
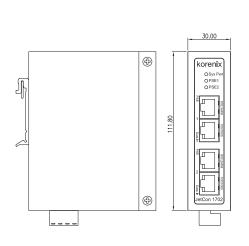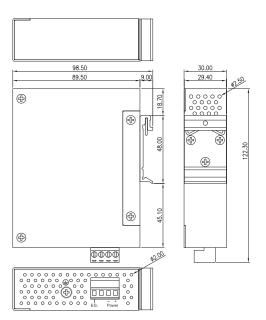
Applications

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 protetion
Over Current Protection (Icut): 600mA , IEEE 802.3at, 350mA 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 – IP 30
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

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