

Industrial Gigabit Ethernet PoE Media Converter

JetCon3701G Gigabit PoE Media Converter



- Converts 10/100/1000TX to 100/1000 Fiber
- Flexible SFP Fiber transceiver design
- High Power 30W PoE PSE Media Converter
- IEEE 802.3af / IEEE 802.3at Compliance
- Fault Alert for power
- Two way Link loss forwarding
- Power redundancy with wide range input
- Slim Case with IP-31 grade protection
- Wide range operating temperature
- Power Redundancy with 10-60V wide voltage input
- Railway Certification EN50121-4 Compliance



Wide Temp



Gigabit



10-60V



Dual Power



EN50121-4

Overview

The JetCon 3701G industrial Gigabit PoE Ethernet media converter is an advanced and cost effective high power PoE media converter. JetCon 3701 is not only designed with IEEE 802.3af / IEEE 802.3at compliance but also has slim metal case and IP-31 protection. For its strong characteristics, not only single power input, the functionality of real time redundant power backup results in a real Industrial Gigabit Ethernet Media Converter with a non-stop transmission.

As the trend of fiber interface, JetCon 3701G combines a hot-swappable socket for Small Form-factor Pluggable (SFP) fiber transceiver. To adopt different type of fiber optical cable or enlarge fiber network campus, the JetCon 3701G just need replace new fiber transceiver to meet the specification of optical fiber cable and achieve best inventory performance.

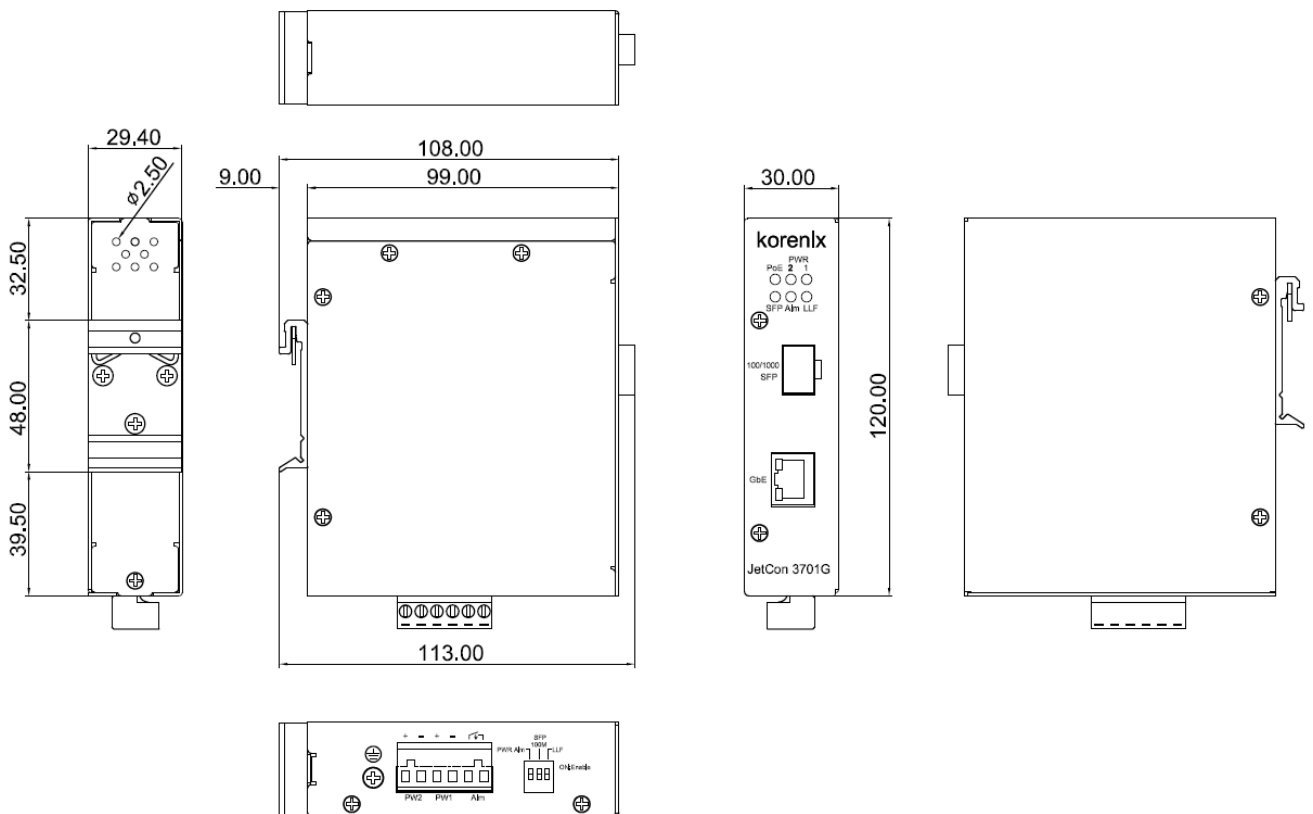
Most of Gigabit Ethernet Media converter features Link Loss Forwarding function (LLF) to forward link status change to alert remote or central management system. However, this is only for the cable event and is not enough for industrial network application. JetCon 3701G provides an alarm relay to trigger out a real alarm signal for port or power event. The alarm mechanism can be configured by a simple DIP switch and trigger an external alarm equipment to inform maintenance engineers. It makes a result of maintenance time saving.

The JetCon 3701G supports graceful traffic management ability, it also compliance with EN50121-4 certification. All of traffic will be forwarding by the packet precedence or priority ID and result as different service priority. Besides, it also filter unnecessary broadcast packet by broadcast storm control and drop abnormal packet to enlarge network performance.

Appearance



Dimension



Specification

Technology	
Standard	IEEE802.3 10Base-T IEEE802.3u 100Base-TX/FX IEEE802.3ab 1000Base-T IEEE802.3z Gigabit Ethernet Fiber IEEE802.3x flow control and back-pressure. IEEE802.1p Class of Service IEEE802.1Q Quality of Service IEEE 802.3af Power over Ethernet IEEE 802.3at High Power PoE
Performance	
Forwarding Technology	Store and Forward technology with 64-10K bytes packet forwarding ability
System Throughput	1.49 Mpps
Packet buffer	1 Mbits
MAC Address	8k
Link Loss Forwarding	Two-way loss-signature auto forwarding, configured by DIP switch
Event Alarm	Configurable relay alarm output for power events
Class of Service	4 queues for each port with 8:1 forwarding scheme for High/Low queue
Quality of Service	Supports Tag based packet priority, IPv4 ToS and IPv6 DSCP
Broadcast filtering	1000Mbps: 20000 frames/per second 100Mbps: 2000frames/per second 10Mbps: 200frames/per second
PoE forwarding conductor	RJ-45: V+(1,2), V- (3,6)
PoE forwarding capability	PoE Port: 15W/IEEE8-2.3af, 30W/IEEE 82.3at, with high power voltage input PoE System Power Budget: 30W at 75°C Ambient temperature
Interface	
Ethernet Port - RJ-45	1 x 10/100/1000 Base-TX with Auto MDI/MDI-X function, Auto-Negotiation 1 x SFP socket with hot-swappable function for 100/1000 Ethernet SFP Transceiver
Connectors	10/100/1000 Base-TX: RJ-45 SFP socket: support 3.3V Gigabit Ethernet 1.25Gbps Fiber Transceiver. Terminal block: 4-Pin for redundant power input; 2-Pin for alarm relay output.
Cables	RJ-45 Connector: 4 pairs of Cat-5e UTP/STP cable Arrangement for 1000Base-T. Maximum link distance is 100meters.
Diagnostic LEDs	System: - 2 x Power (Green): On (Power On), Off (Power Off) - 1 x Link Loss Forwarding (Red): On (Link Loss), Off (Data Transfer) - 1 x Alarm (Red): On (Disconnect), Off (Connected) - 1 x Power over Ethernet (Green): On (PD Detect), Off (None-Detect) RJ-45 port: - Link/Activity (Green): On (Link), Blinking (Activity) - Speed (Amber): On (Speed 1000), Off (Speed 10/100) SFP port: - Link/Activity (Green): On (Link), Fast Blinking (Speed 1000), Slow Blinking (Speed 100)
DIP Switch	DIP-1 : Power Event alarm Enable/Disable DIP-2 : Fix Speed 100 Mbps DIP-3 : Link Loss Forward (LLF) Enable/Disable
Power Connector	Removable Terminal Block: 10-60V power Input

Power Requirement	
Power	Removable Terminal Block: 10-60V power Input IEEE 802.3at 30W PoE application: DC 53-57V IEEE 802.3af 15.4W PoE application: DC 46-57V Power input with polarity reverse correction and over current protection.
Power Consumption	2.5Watts/ DC 48V (without PoE loading)
Mechanical	
Enclosure Protection	Ingress Protection code - 31
Case	Slim metal case
Mounting	DIN Rail
Dimension	99(D) x30(W)x 120(H) mm (Without Din-rail kit)
Weight	0.6kg with package 0.9kg without package
Environmental	
Operating Temperature	-40°C-75°C
Operating Humidity	0% - 95% non-condensing
Storage Temperature	-40°C-80°C
Storage Humidity	0%- 95% non-condensing
Approvals	
EMI	CE/EN 55032 class A, FCC Class A, EN 61000-3-2 :2014, EN 61000-3-3, EN 61000-6-4, EN50121-4 (Compliance)
EMS	CE/ EN 55024, EN 61000-6-2, IEC 61000-4-2,IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
Shock	IEC60068-2-27 (Compliance)
Vibration	IEC60068-2-6 (Compliance)
Free Fall	IEC60068-2-32 (Compliance)
Warranty	5 years
Ordering Information	
JetCon 3701G	Industrial Gigabit PoE Ethernet Media Converter
Includes	1 x JetCon 3701G Industrial Gigabit PoE Ethernet Media Converter 1 x Quick Installation Guide
Optional Accessories	
Fiber Transceiver	Gigabit Multi-Mode SFP Transceiver Gigabit Single-Mode SFP Transceiver Gigabit BIDI/WDM Single-Mode SFP Transceiver 100Base Multi-Mode SFP Transceiver 100Base Single-Mode SFP Transceiver 100Base BIDI/WDM Single-Mode SFP Transceiver