INJ-IG60-24

Industrial Gigabit IEEE802.3af/at PoE Injector (15.4/30/36/60/72W, 12/24/48VDC)

- 12/24/48VDC redundant dual input power with booster for PoE output
- Regulate PoE output voltage
- Power output 15.4W/30W/36W/60W72W select by DIP SW
- Compliant with 10/100/1000Base-T(X) & IEEE802.3af/at PoE
- EN60950-1, EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC certified

The industrial-grade single-port Gigabit PoE injector INJ-IG60-24 securely provides power and data transmission through Ethernet cables, it operates on 24/48VDC power input and compliant with the original IEEE 802.3af-2003 and updated IEEE 802.3at-2009 PoE standards, providing up to 15.4 W and 30W DC power per port. In addition, it can provide up to 60W of power through a special design using 4 pairs of Cat5e cables. It is designed for harsh environments and can be used in industrial networks, traffic monitoring, safety automation applications, urban security, and smart transportation systems. It is also suitable for many military or utility market applications where environmental conditions exceed commercial product specifications.

Features

- Provides 1 port IEEE 802.3at/af PoE Injector
- PoE Mode A/B Select by DIP SW
- 4 Pairs (60W/72W) PD handshake mode select by DIP SW (Such as AXIS® IP cam)
- Wide operating temperature -40 ~ 75° C (INJ-IG60-E24)
- IP30 rugged metal housing and fanless

Specifications

IEEE Standard	IEEE 802.3	10Base-T Ethernet
	IEEE 802.3u	100Base-TX Fast Ethernet
	IEEE 802.3ab	1000Base-T Gigabit Ethernet
	IEEE 802.3at	Power over Ethernet+, PoE+
	IEEE 802.3af	Power over Ethernet, PoE
PoE Standard & RJ-45 Pin Assignment	RJ-45 supports IEEE 802.3at/af Middle-Span Alternative B mode or End-Span Alternative A mode, set by DIP SW	
	End-Span, Alternative A mode Positive (V+): RJ-45 pin 1, 2. Negative (V-): RJ-45 pin 3, 6. Data (1, 2, 3, 6, 4, 5, 7, 8)	
	Middle-Span, Alternative B mode Positive (V+): RJ-45 pin 4,5 Negative (V-): RJ-45 pin 7,8 Data (1, 2, 3, 6, 4, 5, 7, 8)	
Network Connector	1 RJ-45 for 10/100/1000Base-T Data, and 1 RJ-45 for 10/100/1000Base-T Data with PoE Output power	
Network Cable	UTP/STP above Cat. 5e cable	
	EIA/TIA-568 100-ohm (100m)	
LED	System: Power 1 (Green), Power 2 (Green), Fault (Amber)	
	4/2 Pairs (Green) ON: 4 Pairs PoE Power output for 60/72W PoE / OFF: 2 Pairs PoE Power output	

DIP SW	SW1	ON: Alt B mode (4, 5, 7, 8), OFF: Alt A mode (1, 2, 3, 6)
	SW2	ON: Hi Power PoE 36W(in 2 pair), or 72W (in 4 pair) OFF: Standard PoE 15.4W/30W (in 2 pair), or 60W (in 4 pair)
	SW3	ON: 4 Pair PoE Pin Ultra-High Power 60W/72W PoE Output OFF: 2 Pair PoE Pin depand on DIP SW 1,2
	SW4	ON: For Particular PD in 4 pair mode, PoE Handshake by pin 1, 2, 3, 6, 4, 5, 7, 8 (Such as AXIS® Q60 series) OFF: General PD
Reverse Polarity Protection	Supported for power input	
Overload Current Protection	Supported	
Power Supply	Redundant Dual DC 12/24/48V (10~57VDC) Input power (Removable Terminal Block)	
	Built-in very high efficiency booster(91~96%) to rise up 52VDC for PoE output	
	Regulated PoE output voltage (52VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100meter	
PoE Power Budget	Maximum Ultra High Power 60W, IEEE 802.3at 30W, IEEE 802.3at High power 36W, IEEE 802.3af 15.4W	

Power Consumption

INJ-IG60-24 in 30W mode (2 Pair)

Input Voltage	Input Power Consumption	Device Power Consumption	PoE Power Budge	Boost Efficiency
12VDC	33.9W	1.1W	30W	91.46%
24VDC	33W	1.4W	30W	94.90%
48VDC	33.2W	1.9W	30W	95.80%

INJ-IG60-24 in 60W mode (4 Pair)

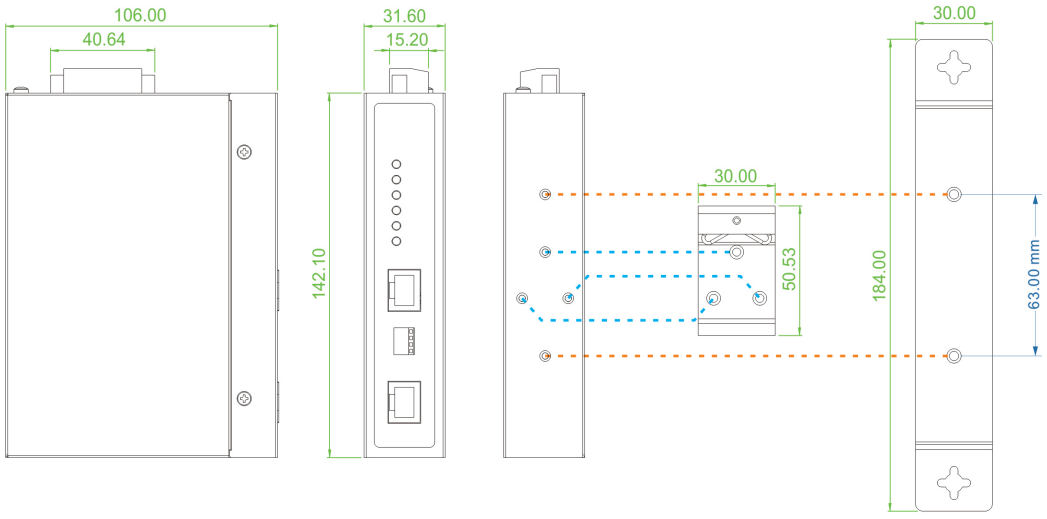
Input Voltage	Input Power Consumption	Device Power Consumption	PoE Power Budge	Boost Efficiency
12VDC	67.1W	1.1W	60W	90.90%
24VDC	65.2W	1.4W	60W	94.10%
48VDC	64.7W	1.9W	60W	95.50%

Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC
Removable Terminal Block	Provides 2 redundant power, alarm relay contact, 6 Pin
Operating Temperature	-10 ~ 60°C (INJ-IG60-24) -40 ~ 75°C (INJ-IG60-E24)
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged Metal, IP30 Protection and fanless
Dimensions	106 x 31.6 x 142 mm (D x W x H)
Weight	0.425kg
Installation Mounting	DIN Rail mounting, or Wall Mounting (Optional)
MTBF	1,403,339 Hours (MIL-HDBK-217)
Warranty	5 years

Certification

EMC	CE (EN55024, EN55032)
EMI	FCC Part 15 Subpart B Class A, CE
Railway Traffic	EN50121-4
Immunity for Heavy Industrial Environment	EN61000-6-2
Emission for Heavy Industrial Environment	EN61000-6-4
EMS (Electromagnetic Susceptibility) Protection Level	EN61000-4-2 (ESD) Level 3, Criteria B
	EN61000-4-3 (RS) Level 3, Criteria A
	EN61000-4-4 (EFT) Level 3, Criteria A
	EN 61000-4-5 (Surge) Level 3, Criteria B
	EN 61000-4-6 (CS) Level 3, Criteria A
	EN61000-4-8 (PFMF) Field strength 300A/m Criteria A
Safety	EN60950-1
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Dimensions



Side View | Front View | Rear View | DIN-Rail Kit View | Wall-Mount Kit View (Optional Accessory)

Ordering Information

Model Name	Ethernet	PoE Port		Power Input	Certification				Operating Temperature
	10/100/1000 Base-T	IEEE 802.3at (PSE)	Power Budget	Redundant	EN60950-1	EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC	
INJ-IG60-24	1	1	15/30/36/60/72W	12/24/48VDC	V	V	V	V	-10~60°C
INJ-IG60-E24	1	1	15/30/36/60/72W	12/24/48VDC	V	V	V	V	-40~75°C

Optional Accessories

Wall Mount Kit

IND-WMK01	Wall Mount kit for Industrial product, 184 x 30mm

Industrial Power Supply

MDR-40-48	Industrial Power, Input 85 ~ 264VAC/120 ~ 370VDC, Output 48VDC, 40W, -20 ~ +70°C (For 30W@2pair application)
NDR-120-48	Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 120W, -20 ~ +70°C (For 60W@4pair application)