

INJ-IG60-24

Gigabit Ethernet PoE+ Injector
IEEE802.3at/af, 15.4/30/36/60W
 (24V Booster)



INJ-IG60-E24 is an industrial grade, single port, gigabit Ethernet PoE (Power over Ethernet) injector. PoE technology describes a system to pass electrical power safely, along with data, on Ethernet cabling. The original IEEE 802.3af-2003 PoE standard provides up to 15.4 W of DC power to each device. The updated IEEE 802.3at-2009 PoE standard also known as PoE+ or PoE plus, provides up to 30 W of power. Additionally, INJ-IG60-E24 can provide up to 36/60 W through the non-standard use of all 4 pairs of category 5 cable. Housed in a rugged DIN rail or wall mountable enclosure, this product is designed for harsh environments, such as industrial networking, security, intelligent transportation systems (ITS) and is also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications. Standard operating temperature range models (-10 to 60°C) and wide operating temperature range models (-40 to 75°C) fulfill the special needs of industrial automation applications.

Features

- Provides 1 port IEEE802.3at/af PoE Injector
- Power output 15.4W, 30W, 36W, 60W
- 24/48VDC redundant dual input power design voltage boost up to 55VDC for PoE
- Wide operating temperature -40 ~ 75°C (INJ-IG60-E24)
- UL60950-1, CE, FCC, Railway traffic EN50121-4 certification
- Industrial Grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified
- IP30 rugged metal housing

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, IEEE802.3af
PoE Standard	IEEE802.3at, IEEE802.3af
PoE RJ-45 Pin Assignment	RJ-45 support 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	Per unit: Power 1 (Green), Power 2 (Green), Fault (Amber) PoE Status (Green): Flash (Over-load or short), ON : PoE normal working OFF : PoE No Power output 4/2 Pairs (Green): ON: 4 Pairs PoE Power output for 60W PoE OFF: 2 Pairs PoE Power output
DIP SW	SW1 Reserved SW2 ON: Hi Power 36W 36W PoE output OFF: Standard PoE 802.3af (15.4W), 802.3at (30W) SW3 ON: 4 Pair PoE Pin Ultra-High Power 60W PoE Output OFF: 2 Pair PoE Pin depend on DIP SW 1,2 SW4 ON: Alternative B mode PoE Power Pin 4, 5, 7, 8 (When DIP SW 3 Off) OFF: Alternative A mode PoE Power Pin 1, 2, 3, 6 (When DIP SW 3 Off)
Reserve Polarity Protection	Present
Overload Current Protection	Present
Power Supply	Redundant Dual DC 24/48V (20~57VDC) Input power (Removable Terminal Block)

PoE Power Output	Maximum Ultra High Power 60W, IEEE802.3at 30W, IEEE802.3at High power 36W, IEEE802.3af 15.4W
Power Consumption	Max 31.5W @24VDC input (support up to 30W for PoE Output) Max 61.8W @24VDC input (support up to 60W for PoE Output)
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC
Removable Terminal Block	Provide 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
Dimensions	106 x 38.6 x 142mm (D x W x H)
Weight	0.63kg
Installation Mounting	DIN Rail mounting and Wall Mounting
EMC/EMS	CE, FCC
EMI	FCC Part 15 Subpart B Class A, CE EN 55022 Class A EN61000-6-4 – Emission for industrial environment
EMS	EN61000-6-2 – Immunity for Industrial environment EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (EFT) Level 3, Criteria A EN61000-4-5 (Surge) Level 3, Criteria B EN61000-4-6 (CS) Level 3, Criteria A EN61000-4-8 (PMF, Magnetic Field) Level 3, Criteria A
Safety	UL60950-1 (pending)
Rail traffic	EN 50121-4
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
MTBF	763,725Hrs
Warranty	5 years

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

Application

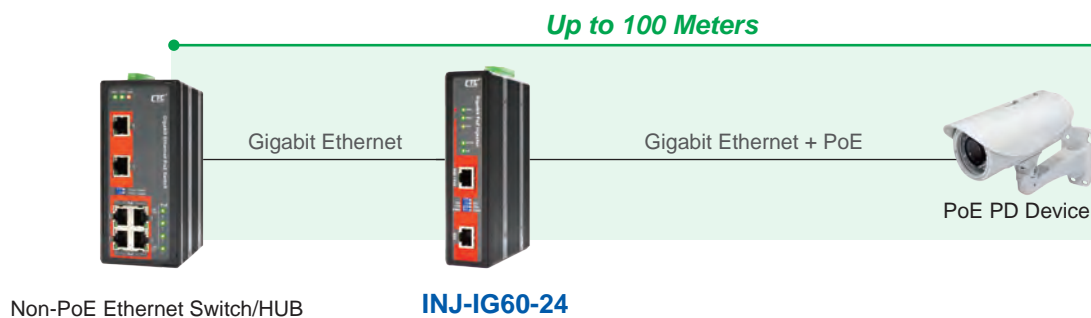
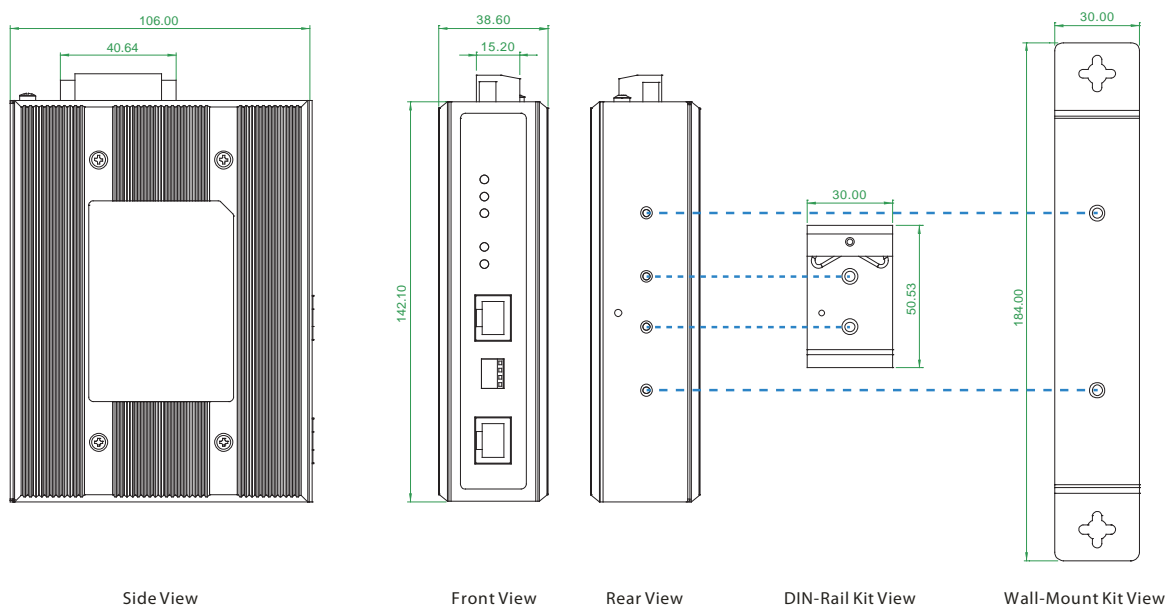


Figure : INJ-IG60-24 & INJ-IG60-E24 Gigabit Ethernet PoE Injector

Dimensions



Ordering Information

Model Name	Description
INJ-IG60-24	Industrial 10/100/1000Base-T with IEEE802.3at/af PoE Injector, 15.4/30/36/60W (24V Booster, -10 ~ +60°C)
INJ-IG60-E24	Industrial 10/100/1000Base-T with IEEE802.3at/af PoE Injector, 15.4/30/36/60W (24V Booster, -40 ~ 75°C)

Accessories

DR-120-24	Industrial Power, Input 88 ~ 132VAC / 176 ~ 264VAC, Output 24VDC, 120W, -10 ~ +60°C
DR-4524	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 48W, -10 ~ +50°C
MDR-40-24	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 40W, -20 ~ +70°C
MDR-60-24	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 60W, -20 ~ +70°C

Temperature
INJ-IG60 - 24
 Example: INJ-IG60 - E24