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# INJ-IG01-PH

Gigabit Ethernet PoE+ Injector IEEE802.3at/af, 15.4/30/36/60W

INJ-IG01-PH 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-IG01-PH can provide up to 36/60W 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 select by DIP SW
- PoE Mode A/B Select by DIP SW

# 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	RJ-45 support IEEE 802.3at/af Middle-Span Alternative B		
Pin	mode or End-Span Alternative A mode, set by DIP SW		
Assignment	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		
Network	_ Data (1, 2, 3, 6, 4, 5, 7, 8)		
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 (Green)		
	Alt A/PoE ,Alt B/PoE (Green)		
	ON when a PD device is connected to the GbE+PoE RJ-45 connector and the		
	Injector is feeding power in Alt A or B mode.		
	Blinking One of the Injector faults (overload, short		
DID CIVI	circuit or over-temperature) occurs SW1 ON: Alternative B mode		
DIP SW	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)		
	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 depand on DIP SW 1,2		
	SW4 60W PD handshake mode		
	OFF: General PD at ether 2 or 4 pairs mode ON: Compatible with some particular PD devices at high		
	power mode (4 Pair mode), such as AXIS® O60		
Reserve			
Polarity	Present		
Protection Overload			
Current	Present		
Protection			
Power Supply	(44~57VDC) 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		
	<b>-</b>		

- 4 Pairs PD handshake mode select by DIP SW (Such as AXIS® IP cam)
- Wide operating temperature -40 ~ 75°C (INJ-IG01-PHE)
- IP30 rugged metal housing and fanless

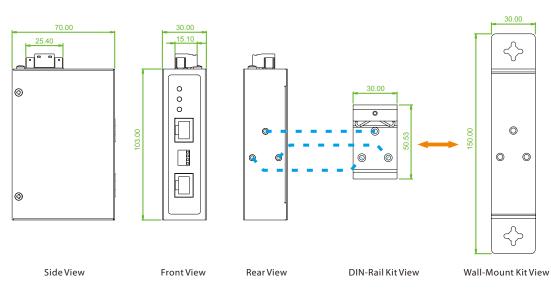
Power Consumption		In 30W mode (2 Pairs)	In 60W mode (4 Pairs)	
	Input Power Consumption (Input 48VDC)	31.1W	62.8W	
	PoE Output Power	30W	60W	
Removable Terminal Block	Provide 2 Pin for power ir	nput connectorn		
Operating	-10 ~ 60°C (INJ-IG01-PH) -40 ~ 75°C (INJ-IG01-PHE)			
Temperature				
Operating Humidity	5% to 95% (Non-condensing)			
Storage Temperature	-40 ~ 85°C			
Housing	Rugged Metal, IP30 Protection and fanless			
Dimensions	70 x 30 x 103 mm (D x W x H)			
Weight	215g			
Installation Mounting	DIN Rail mounting, and Wall Mounting (Optional)			
MTBF	409,994Hours (MIL-HDBK-217)			
Warranty	5 years			
Certification				
EMC	CE			
EMI	FCC Part 15 Subpart B Class A, CE EN55022 Class A			
Railway Traffic	EN50121-4			
Immunity for Heavy Industrial environment	EN 61000-6-2			
Emission for Heavy industrial environment	EN 61000-6-4			
EMS	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	d strength 300A/	m Criteria A	
Shock	IEC 60068-2-27			
Freefall	IEC 60068-2-32			
Vibration	IEC 60068-2-6			

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# Application

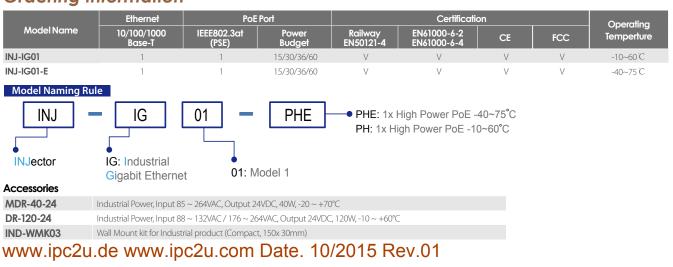


#### Figure : INJ-IG01-PH Gigabit Ethernet PoE Injector



## Dimensions

# **Ordering Information**



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