INJ 1100-T DIN Rail PoE Injectors with electrical isolation

perle.com/products/poe-injectors/din-rail-inj-1100-t.shtml

IEEE 802.3bt/at/af Mid-span Injector up to 60W

- 10/100/1000 Mbps
- Supply PSE power to PoE, PoE+ and Hi-PoE compliant devices
- Provide 4 to 60 Watts of PoE power
- IEEE 802.3af, IEEE802.3at and IEEE802.3bt compliant
- Support for PoE PDs: Class 1 to 6 & Type 1, 2 and 3
- Extended supply voltage range of 18 V DC ... 57 V DC, redundant
- Safe shield connection to ground potential
- Optional Extended temperature range of -40°C to +75°C
- Electrical isolation of the internal power supply unit

INJ 1100-T PoE Injectors are DIN Rail mounted single port, **PoE mid-span injectors**. They act as an intermediary devices between a non-PoE switch and a PoE device to inject **fully compliant** power over the Ethernet cable. With electrical isolation of the internal power supply, the INJ-1100-T units are also protected against short circuits on the PoE side.

Generating **up to 60 Watts**, the INJ 1100-T provides electrical power to remote **PD access points**, **pan-tilt and zoom (PTZ) cameras** and **video-phones**. It complies with the **IEEE802.3bt Hi-PoE (60W of power)** or **IEEE 802.3at PoE+ (30W of power)** standards and is also backward compatible with IEEE802.3af PoE (15.4W of power). Learn more about PoE.

With the INJ 1100-T, there is no need to buy an expensive PoE switch or install electrical wiring and outlets in hard to reach locations. Just use and open port on an existing non-PoE switch to save time and money by sending power and data over the same cable.

INJ 1000 PoE Injector Benefits

DIN Rail Enclosure	Easily mount on a DIN rail or inside distribution boxes using native DIN Rail enclosure with grounding clip. No need for add-on brackets.
Power Over Ethernet (PSE)	Performs the Power Sourcing Equipment (PSE) function on 1 UTP port for IEEE 802.3af (up to 15.4 watts PoE), IEEE 802.3at (up to 30 watts PoE+) or IEEE802.3bt (up to 60 watts Hi-PoE) compliant devices.

Electrical isolation of the internal power supply unit	The supply voltage and Power over Ethernet port are electrically isolated. This provides optimum protection against short circuits in the data cables on the field side. The passive network isolator protects Ethernet devices from potential differences of up to 4 kV.

Potential Separation	Safe shield connection to ground potential
On-board PoE Power Controller	This PoE power controller provides compliant power provisioning and monitoring, properly sensing through signature detection whether or not the attach Ethernet devices are PoE capable or not. This provides a safe connection for both PoE and Non-PoE capable devices. *Click here for more details*
Advanced Power Management	• PD signature detection • Current limiting protection • Over-Current Protection • PD power classification detection (Class 0,1,2,3,4,5,6) • Reverse polarity protection

	INJ 1100-T 27030098	**INJ 1110-T 27030108**
Serial interface		
Interface 1	Ethernet	
Connection method	RJ45 socket	
Transmission length	100 m (including patch cables)	

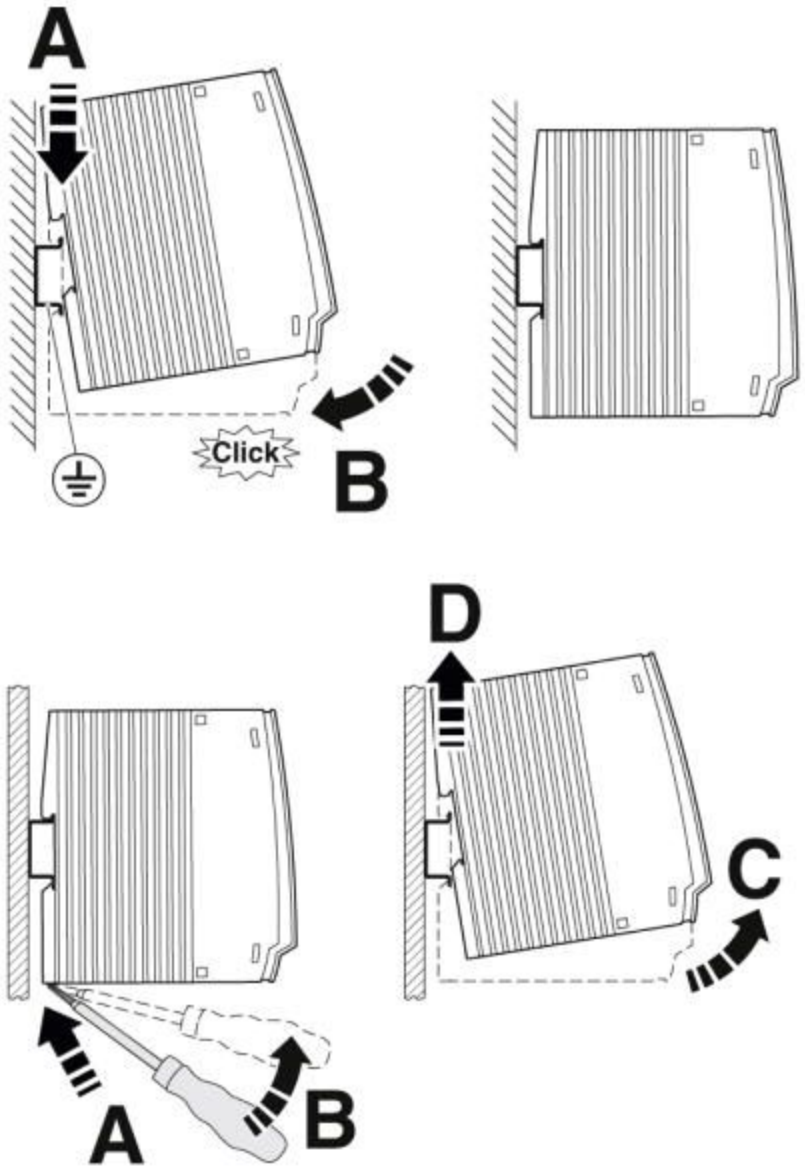
Pin assignment	1:1	
Basic functions	PSE/Midspan, compliant with IEEE 802.3af, at	
Serial transmission speed	10/100/1000 Mbps	
Output nominal voltage	54 V DC (PoE)	
Output power	30 W	60 W
Maximum output power	40 W	75 W
Interface 2	Ethernet	
Connection method	RJ45 CAT5e	
Ambient conditions		
Ambient temperature (storage/transport)	-40°C ... 85°C	
Permissible humidity (operation)	10 % ... 95 % (non-condensing)	
General		
Electrical isolation	VCC // FE // PoE	
Test voltage data interface/power supply	1.5 kV AC (50 Hz, 1 min.)	
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU	
Mounting position	vertical	
Net weight	324.72 g	
Housing material	Plastic	
Color	Gray	
MTTF (SN 29500 standard, temperature 25 °C, operating cycle 21 % (5 days a week, 8 hours a day))	2342 Years	3062 Years
MTTF (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day))	1167 Years	1397 Years

MTTF (SN 29500 standard, temperature 40 °C, operating cycle 100 % (7 days a week, 24 hours a day))	467 Years	558 Years
Conformance	CE-compliant	
UL, USA	UL 60079-0 Ed. 6 / UL 60079-15 Ed. 4	
UL, USA/Canada	Class I, Zone 2, AEx nA IIC T4, Ex nA IIC Gc X T4	
	Class I, Division 2, Groups A, B, C, D	
UL, Canada	CSA 22.2 No. 60079-0 Ed. 3 / CSA 22.2 No. 60079-15:16	
Standards and Regulations		
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU	
Type of test	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6	
Test result	10 Hz ... 57 Hz, amplitude ±3.5 mm, 57 Hz ... 150 Hz, 5g	
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27	
Test result	30g for 11 ms, three shocks in each spatial direction	
Type of test	Continuous shock according to EN 60068-2-27/IEC 60068-2-27	
Test result	10g for 16 ms, 1000 shocks in each spatial direction	
Standards/regulations	EN 61000-4-2	
Contact discharge	± 6 kV (Test Level 3)	
Indirect discharge	± 6 kV	
Standards/regulations	EN 61000-4-3	

Frequency range	80 MHz ... 3 GHz (Test Level 3)
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-4-5
Signal	± 1 kV (Data line, asymmetrical)
	± 2 kV (I/O cable on field side only, asymmetric)
Standards/regulations	EN 61000-6-4
	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Conformance	CE-compliant
UL, USA	UL 60079-0 Ed. 6 / UL 60079-15 Ed. 4
UL, USA/Canada	Class I, Zone 2, AEx nA IIC T4, Ex nA IIC Gc X T4
	Class I, Division 2, Groups A, B, C, D
UL, Canada	CSA 22.2 No. 60079-0 Ed. 3 / CSA 22.2 No. 60079-15:16
Noxious gas test	ISA-S71.04-1985 G3 Harsh Group A
Dimensions	
Width	30.2 mm
Height	130 mm
Depth	120 mm
Note	
Utilization restriction	1
Power supply	
Nominal supply voltage	24 V DC

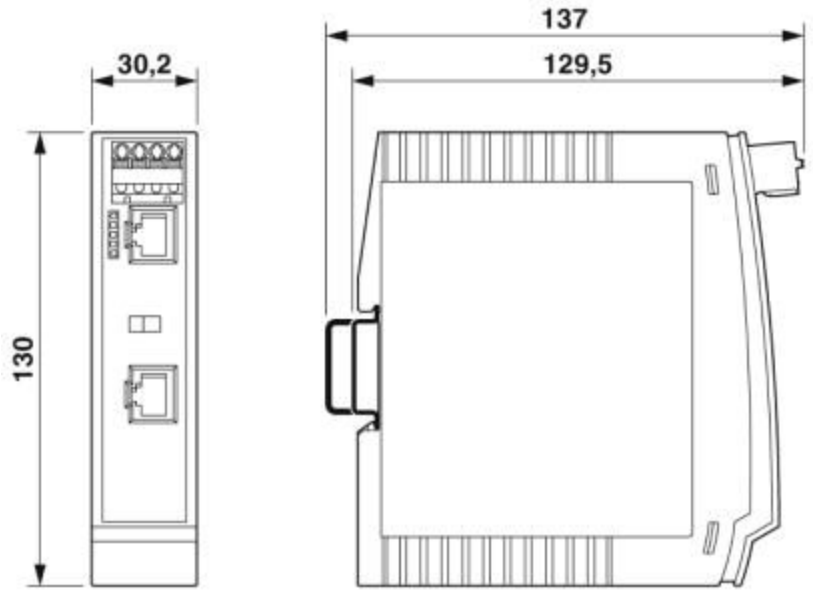
	48 V DC	
Supply voltage range	18 V DC ... 57 V DC	
Max. current consumption	2.1 A	4.2 A
	1.4 A (24 V DC)	2.73 A (24 V DC)
	0.7 A (48 V DC)	1.34 A (48 V DC)
Power consumption	≤ 75 W	
Protective circuit	Reverse polarity protection	
Conductor cross section flexible max.	4.00 mm²	
Conductor cross section flexible min.	0.75 mm²	
Conductor cross section solid max.	4.00 mm²	
Conductor cross section solid min.	0.75 mm²	
Conductor cross section AWG max.	12	
Conductor cross section AWG min.	20	
Environmental Product Compliance		
REACH SVHC	Lead 7439-92-1	
China RoHS	Environmentally friendly use period: unlimited = EFUP-e	

Easily Mount your PoE Injector on a DIN Rail



INJ 1100-T PoE Injector Dimensional drawing of Compact housing

Two RJ45 Sockets



INJ 1100-T PoE Injector Front View

Two RJ45 Sockets