30 Watt Gigabit PoE injector

ETH-POEINJ30-1G-VI-v2

Proxim's 30 Watt Gigabit PoE Injector provides power over Ethernet to Tsunami, Edge and ORiNOCO device, when no PoE out is required on the second Ethernet port of the device.

- Gigabit Ethernet Interface
- Passive PoE, non compliant with IEEE 802.3at protocol (Continuous flow of power with no detection)
- Protection against short circuit, over current and over voltage (The output can be shorted permanently without damage)
- Safety certified against IEC/UL/EN 62368-1 standard
- Level VI and COC power efficiency the second Ethernet port of the device.

Ordering Information

CPN	Description
949-00144	Gigabit , 30W, passive PoE injector with RJ45, level VI Compliance

RJ-45 Pin-Out

PIN	Data	Power
1	Data	Negative Out
2	Data	Negative Out
3	Data	Positive Out
4	Data	Positive Out
5	Data	Positive Out
6	Data	Positive Out
7	Data	Negative Out
8	Data	Negative Out

Specifications

EMC	FCC part 15B (2017) Class B ANSI C63.4-2014 EN 55032 (2015) class B
Immunity	EN 55035 (2017) Harmonic EN61000-3-2:2014 Fluctuations-Flicker EN61000-3-3:2013 ESD EN61000-4-2:2009 Electromagnetic Field EN61000-4-3:2006/08/10 Electric Fast Transient EN61000-4-4:2012 Surge EN61000-4-5:2014 RF Field EN61000-4-6:2014 Voltage Dips EN61000-4-11:2004
Isolation Test	10 mA at 1500 VDC for 1 minute
Insulation Resistance	50 MΩ at 500 VDC for 1 minute
Static Electricity	Contact discharge ±4 KV Air discharge ±8 KV
Retention Time	5 msec min. 100 VAC and maximum load

Electrical Rating

Input Inlet	C14 Connector
Input Voltage	100 to 240 VAC, 47 to 63 Hz
Input Current	0.7 A max
Over Current Protection	1.1 A max
Leakage Current	3.5 mA max
Output Voltage	56.0 VDC
Output Current	0.536 A
Output Ripple	560 mV p-p
Output Power	30.02 W

Environment & Mechanical

Temperature Range	Operating: 0 to +40 °C Storage: -30 to +70 °C
Relative Humidity (non-condensing)	Operating: 35 to 90 % Storage: 10 to 95 %
Dimensions	160 (L) x 62.5 (W) x 34.2 (H) mm 6.30 (L) x 2.44 (W) x 1.34 (H) inch
Weight	175±5 g / 6.2±0.2 oz
MTBF	≥ 50k hours

115 VDC – 60 Hz	No Load	Load Condition				
	0%	10%	25%	50%	75%	100%
Output current (mA)	-	53.6	134	268	402	536
Output voltage (V)	56.201	56.215	56.196	56.191	56.185	56.180
Active output power (W)	-	3.013	7.530	15.059	22.586	30.112
Input voltage (V)	115	115	115	115	115	115
Input frequency (Hz)	60	60	60	60	60	60
Input power (W)	0.08	3.49	8.59	17.1	25.62	34.21
Total harmonic distortion (TDH) V%	0.12	0.12	0.13	0.14	0.17	0.18
True power factor (W/VA)	0.073	0.355	0.460	0.509	0.543	0.574
Power consumed (W)	0.08	0.477	1.060	2.041	3.034	4.098
Active mode efficiency	-	86.33%	87.66%	88.06%	88.16%	88.02%
Average active efficiency	-	-	87.98%			

230 VDC – 50 Hz	No Load	Load Condition				
	0%	10%	25%	50%	75%	100%
Output current (mA)	-	53.6	134	268	402	536
Output voltage (V)	56.203	56.216	56.197	56.192	56.187	56.146
Active output power (W)	-	3.013	7.530	15.059	22.587	30.094
Input voltage (V)	230	230	230	230	230	230
Input frequency (Hz)	50	50	50	50	50	50
Input power (W)	0.09	3.56	8.71	16.99	25.34	33.9
Total harmonic distortion (TDH) V%	0.13	0.14	0.16	0.18	0.20	0.22
True power factor (W/VA)	0.026	0.302	0.361	0.408	0.434	0.449
Power consumed (W)	0.09	0.547	1.180	1.931	2.753	3.806
Active mode efficiency	-	84.63%	86.45%	88.63%	89.14%	88.77%
Average active efficiency	-	-	88.25%			

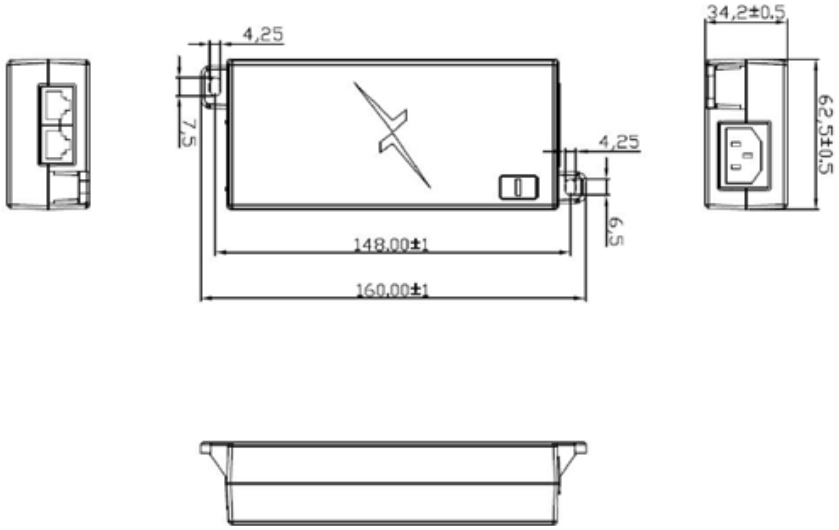
Efficiency

Complies with DOE level VI and CE Ecodesign Requirement

No load Power consumed (W) ≤ 0.10

Average Efficiency ≥ 86.95% [0.071 x ln(30.02) – 0.0014 x 30.02 + 0.67]

Schematics



Package Contents

One Gigabit PoE Injector (ETH-PEOINJ30-1G-VI-v2)

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