# PENB1020A

Universal 19.2W Gigabit PoE Adapter



**3 Year Warranty** 

10/100/1000 (MbPS) Data Rates
Self-contained Injector
100-240Vac Universal Input
Green DC Power LED
Overload and Short Circuit Protection
Regulated Output with Low Ripple
Compliant to UL/IEC/EN60950-1
LPS (Limited Power Source) Compliant
RoHS Compliant



#### **Description**

The PENB1020A Series of Power-over-Ethernet (PoE) adapters operate from a 90 to 264Vac input range, and provide up to 19.2W of output power at an output voltage of 48Vdc. These models are capable of operating with Gigabit Data rates, and include features include diagnostic LED, and overvoltage, overload, and short circuit protection. This non-compliant adapter does not require a "handshake" signal to enable the output voltage.

#### All specifications are typical at nominal input, full load at 25°C unless otherwise stated AC Input MTBF >60,000 hours, calculated (7 years) 100-240Vac +/- 10%, 47-63 Hz single phase 18mS min. @ 115Vac, 60Hz Input Current 0.5A @ 90Vac Hold-Up Time 0.25A @ 180Vac 60mS min. @ 230Vac, 60Hz Input Inrush Current 60A peak, cold start Efficiency 65% minimum Input Protection Internal Primary Current Fuse provided, **Turn-on Time** 2.0 seconds max., at 115v230Vac, 60Hz 250Vac/3.15A 4242Vdc Primary - Secondary, **Dialectric Withstand Bise Time** 100mS max.@ 115/230Vac, 60Hz 2,150Vdc Primary-GND, 500Vdc Secondary - GND Earth Leakage Current **Short Circuit Protection** 10 minutes max. @ 265Vac, 60Hz <250µA @ 264Vac, 60Hz **Output Power** 19.2W continuous, convection cooled **Operating Temperature** 0° to +40°C **Ripple and Noise** See Chart below Storage Temperature -30° to +85°C **Output Voltage** 48Vdc Typical **Relative Humidity** 5% to 95%, non-condensing Altitude 0 to 10.000 ft **Transient Response** 0.5msec for 50% load change typical Regulation Safety Standards UL/IEC/EN60950-1, CE, CB See chart below Case Material 94V-0 Black Polycarbonate Dimensions W: 1.9" x L: 4.44" x H: 1.3". Weight: 120g

### **Specifications**

### **Models**

Model	Output	Output	Ripple	Max.	Regu	lation	IEEE802.3af	AC Input
Number	Voltage	Current	& Noise <sup>1</sup>	Power	Line	Load	Compliant?	Receptacle
PENB1020A4800F01	48Vdc	0.4A	480mV pk-pk	15.4W	<u>+</u> 2%	±5%	No	IEC60320, C14
PENB1020A4800N01	48Vdc	0.4A	480mV pk-pk	15.4W	<u>+</u> 2%	±5%	No	IEC60320, C8

Note: 1. Measured at 20MHz bandwidth, with noise probe as close to output RJ-45 connector as possible, and load terminated with 0.1μF ceramic and 10μF low ESR electrolytic capacitors.

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# PENB1020A



Universal 19.2W

PoE Gigabit

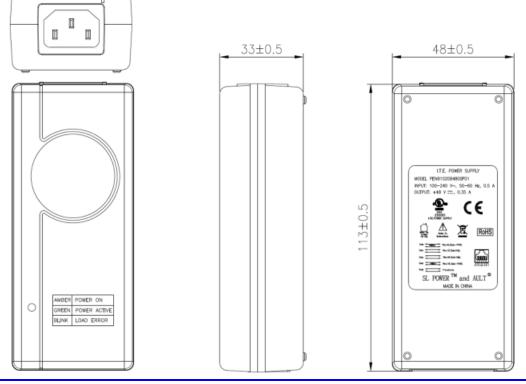
### **3 Year Warranty**

### EMI/EMC Compliance

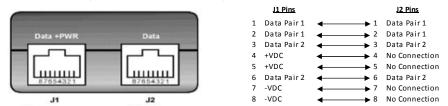
Conducted Emissions	EN55022: 2006+ A1:2007 (Class B)				
Radiated Emissions	EN55022: 2006+ A1:2007 (Class B)				
Static Discharge Immunity	EN55024/IEC61000-4-2, 6kV/8kV, Criteria A				
Radiated RF Immunity	EN55024/IEC 61000-4-3, 3V/m, Criteria A				
EFT/Burst Immunity	EN55024/IEC 61000-4-4, 2kV, 5kHz, Criteria A				
Line Surge Immunity	EN55024/IEC 61000-4-5, 1kV/2kV, Criteria A				
Conducted RF Immunity	EN55024/IEC 61000-4-6, 3V (AM 80%, 1kHz), Criteria A				
Power Frequency Magnetic Field Immunity	EN55024/IEC 61000-4-8, 3A/m, Criteria A				
Voltage Dip Immunity	EN55024/IEC 61000-4-11, 100%, 10mS; 60%, 100mS; 30%, 500mS Criteria A. 100\$, 5000mS, Criteria B				
Line Harmonic Emissions	EN61000-3-2: 2006				
Flicker Test	EN61000-3-3: 2008				

### **Outline Drawing**

IEC320 C14 input receptacle shown. Other options available. Consult factory for details and availability.



### PSA pinout Alternative B (IEEE 802.3af 33.2.2):



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