



Industrial



# SL POWER PW180KA SERIES

20 Watts Single Output  
Industrial Grade

Advanced Energy's SL Power PW180KA AC-DC power supplies are available with a nominal main output 48 V, which have self contained midspan power injector and support power over ethernet up to 20 Watts. PW180KA series has 90 VAC to 265 VAC input voltage range and regulated output with low ripple. IEEE802.3af Compliant and non-Compliant versions are provided.

## AT A GLANCE

### Total Power

20 Watts

### Input Voltage

90 to 265 VAC

### # of Outputs

Single

## SPECIAL FEATURES

- Power over Ethernet (PoE)
- Self Contained Midspan Power Injector
- 90 to 265 VAC Input Range
- Desktop Style
- Single Output up to 20 Watts
- Regulated Output with Low Ripple
- IEEE802.3af Compliant and non-Compliant versions
- CE Compliant
- 3 Years Warranty

## SAFETY

- UL/EN/IEC/CSA62368-1



## ELECTRICAL SPECIFICATIONS

Input									
Input range	90 to 265 VAC, 47 to 63 Hz, 1Ø								
Input current	0.5A max at 90 VAC								
Protection	Internal primary current fuse, inrush limiting								
Output									
Output voltage	48 VDC								
Ripple and noise	<table border="0"> <tr> <td>f &lt; 500 Hz</td> <td>500 mVpk-pk</td> </tr> <tr> <td>500 Hz to 150 kHz</td> <td>200 mVpk-pk</td> </tr> <tr> <td>150 kHz to 500 kHz</td> <td>150 mVpk-pk</td> </tr> <tr> <td>500 kHz to 1 MHz</td> <td>100 mVpk-pk</td> </tr> </table>	f < 500 Hz	500 mVpk-pk	500 Hz to 150 kHz	200 mVpk-pk	150 kHz to 500 kHz	150 mVpk-pk	500 kHz to 1 MHz	100 mVpk-pk
f < 500 Hz	500 mVpk-pk								
500 Hz to 150 kHz	200 mVpk-pk								
150 kHz to 500 kHz	150 mVpk-pk								
500 kHz to 1 MHz	100 mVpk-pk								
Load regulation	±4% ( Maximum deviation from nominal voltage for all loading conditions)								
Transient response	500 µs response time for return to within 0.5% of final value for a 50% load step change								
Efficiency	70% min								
Reliability									
Warranty	3 years								
MTBF	100,000 calculated hours								

## SAFETY

EN/CSA/IEC/UL	EN/CSA/IEC/UL 62368-1
CE Mark	Yes
Dielectric Withstand	3,000 VAC or 4250 VDC primary to secondary

## ENVIRONMENTAL SPECIFICATIONS

Thermal performance	0°C to 40°C, operating temperature with no derating convectonal cooling, non vented case
Storage temperature	-30°C to 85°C
Relative Humidity	5% to 95% non condensing
Altitude	0 to 10,000 feet
Weight	160 grams
Dimensions (W x H x L)	2.40" x 1.35" x 3.98" (61.5mm x 34.2mm x 101.0mm)

## GENERAL SPECIFICATIONS

Data rate	10/100 M bps
Standby mode LED (single) Green	Power supply is on
Topology	Switching-fixed frequency flyback
Leakage current	Less than 0.75 mA at 265 VAC 50 Hz
Spacing	6.4mm primary to secondary
Case material	Black 94V0 polycarbonate

**ORDERING INFORMATION TABLE 1**

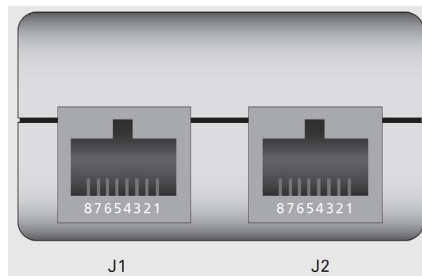
Model Number	Output Voltage	Output Current		Max Watts	Ripple & Noise
		min	max		
PW180KA4800_01	48 V	0.00 A	0.40 A	20.0 W	480 mVpk-pk

**ORDERING INFORMATION TABLE 2**

PW180	K	A	48	00	-	01
Product Family Name	Manufacturing Location	Design Revision Changes	Voltage DC	Connector Number	Input Configuration/Model Type F: IEC320 with ground C14 N: Shaver C8	Standard (no modifications or special packaging)

**PIN ASSIGNMENTS**

Connector	PW180KA	
J1	PIN 1	Data Pair 1
	PIN 2	Data Pair 1
	PIN 3	Data Pair 2
	PIN 4	+ VDC
	PIN 5	+ VDC
	PIN 6	Data Pair 2
	PIN 7	- VDC
	PIN 8	- VDC
J2	PIN 1	Data Pair 1
	PIN 2	Data Pair 1
	PIN 3	Data Pair 2
	PIN 4	No Connection
	PIN 5	No Connection
	PIN 6	Data Pair 2
	PIN 7	No Connection
	PIN 8	No Connection





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## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than four decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

**PRECISION | POWER | PERFORMANCE | TRUST**

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