



Industrial



# SL POWER PW180KB SERIES

15.4 Watts Single Output  
Industrial Grade

Advanced Energy's SL Power PW180KB 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 15.4 Watts. PW180KB series has 90 VAC to 265 VAC input voltage range and regulated output with low ripple, which is IEEE802.3af compliant.

## AT A GLANCE

### Total Power

15.4 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 15.4 Watts
- Regulated Output with Low Ripple
- Complies with EMI/RFI Regulations
- IEEE802.3af Compliant
- CE Compliant
- Impact Resistant Polycarbonate Enclosure
- Private Label Marking and Custom Designs Available
- 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								
Inrush Current	450 mA max								
Leakage Current	Less than 0.75 mA at 265 VAC 50 Hz								
Output									
Output Voltage	48 VDC fixed								
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								
Output Current	0.35 A max.								

## SAFETY

EN/IEC/UL	EN/IEC/UL 60950-1
CE Mark	Yes
Dielectric Withstand	3,000 VAC or 4250 VDC primary to secondary
EMC	EN55022/55024/61000

## PROTECTION

Overload Current Detection	(15.4W/Vport) min./ 400mA max.
Overload Time Limit	50 to 75 mS
Short Circuit Protection	400 to 450 mA max.

## GENERAL SPECIFICATIONS

Topology	Switching-fixed Frequency Flyback				
Dimensions (L x W x H)	3.98 x 2.40 x 1.35 (in), 101.0 x 61.5 x 34.2 (mm)				
Weight	5.95 ounces, 170 g				
Spacing	6.4mm primary to secondary				
Case	Desktop type				
Case Material	Black 94V0 polycarbonate				
Cord and Connectors	Dual RJ45 Jacks built into the enclosure				
Power Mode LED (Two Colors)	<table border="0"> <tr> <td>Amber</td> <td>Power on, detection mode</td> </tr> <tr> <td>Green</td> <td>Injecting full power, power up mode</td> </tr> </table>	Amber	Power on, detection mode	Green	Injecting full power, power up mode
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Green	Injecting full power, power up mode				
Data Rate	10/100M bps				

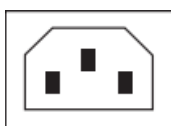
### ORDERING INFORMATION TABLE 1

Model Number	Output Voltage	Output Current		Max Watts	Ripple & Noise
		min	max		
PW180KB4800_01	48 V	0.00 A	0.35 A	15.4 W	480 mVpk-pk

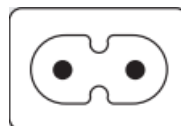
### ORDERING INFORMATION TABLE 2

PW180	K	B	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)

### INPUT CONFIGURATION



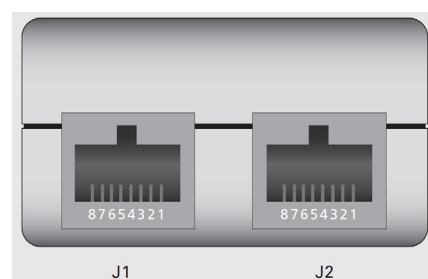
IEC320 w/ground C14 (F)



Shaver C8 (N)

### PIN ASSIGNMENTS

Connector	PW180KB	
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





For international contact information,  
visit [advancedenergy.com](https://www.advancedenergy.com).

[powersales@aei.com](mailto:powersales@aei.com) (Sales Support)  
[productsupport.ep@aei.com](mailto:productsupport.ep@aei.com) (Technical Support)  
+1 888 412 7832

## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three 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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