

# ARTESYN

## AVD200-48S12 SERIES

200 Watt 16<sup>TH</sup> Brick DC-DC Converter



Advanced Energy's Artesyn AVD200-48S12 is a single output DC/DC converter with standard sixteenth-brick outline and pin configuration. It delivers up to 17A output current with 12V output voltage. Above 93.9% ultra-high peak efficiency and excellent thermal performance makes it an ideal choice to supply power in telecom and datacom applications.

### AT A GLANCE

#### Total Power:

200 Watt  
(12 V @ 17 A)

#### Input Voltage:

36 - 75 V

#### Single Output:

12 V nom

### SPECIAL FEATURES

- Delivering up to 17A output
- Ultra-high peak efficiency 93.9%
- Wide input range: 36 V ~ 75 V
- Fully regulated output voltage
- Excellent thermal performance
- No minimum load requirement
- Basic isolation
- Remote control function
- Input under voltage lockout
- Output over current protection
- Output over voltage protection
- Over temperature protection
- ROHS 3.0
- UL94 V-0 materials
- Two year warranty (consult factory for extended terms)

### SAFETY

- IEC/EN/UL/CSA 62368-1
- UL/TUV
- UL94, V-0
- CE Marking

## ELECTRICAL SPECIFICATIONS

Input	
Input range	36 - 75 Vdc
Efficiency (60% load condition)	93.9%
Output	
Rated Output	12 Vdc @ 17 A
Factory Set Voltage	11.76V~12.24 V
Line regulation	0.5%
Load regulation	0.5%
Noise/ripple	280 mV
Temperature coefficient	± 0.02/°C
Over current protection	Hiccup
Over voltage protection	Hiccup
Over temperature protection	Auto-restart
Switching frequency	200 kHz
Isolation	
I/O isolation	2250 Vdc (input to output)

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40 °C to + 85 °C (baseplate operating temperature up to 100 °C)
Storage temperature	-55 °C to + 125 °C
MTBF	8 million hours Telcordia, SR332, Method 1, Case 1

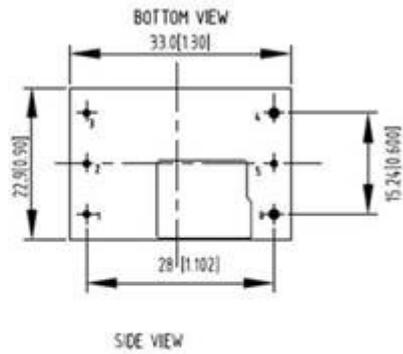
## ORDERING INFORMATION

Standard	Output Voltage	Structure	pin	Package
AVD200-48S12B-7TL	12 Vdc	Baseplate	PIP through hole	Tape reel
AVD200-48S12PB-7TL	12 Vdc	Baseplate	PIP through hole	Tape reel
AVD200-48S12TL	12 Vdc	Open-frame	Bullet pin SMT	Tape reel
AVD200-48S12-6L	12 Vdc	Open-frame	Through hole	Tray
AVD200-48S12P-6L	12 Vdc	Open-frame	Through hole	Tray
AVD200-48S12B-6L	12 Vdc	Baseplate	Through hole	Tray
AVD200-48S12PB-6L	12 Vdc	Baseplate	Through hole	Tray

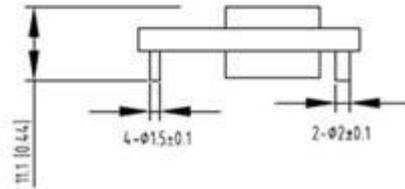
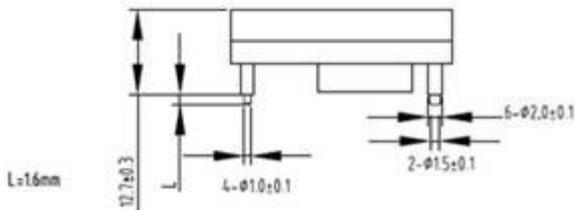
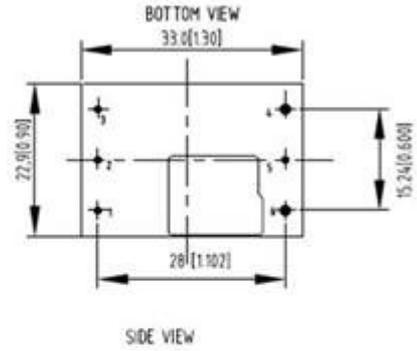
- Standard version is negative enable
- "-6" = 3.8 mm pin length
- "-7" = 1.6mm, Pin Length
- "-L" = RoHS 3.0 compliance
- "-P" = Positive enable

MECHANICAL DRAWING

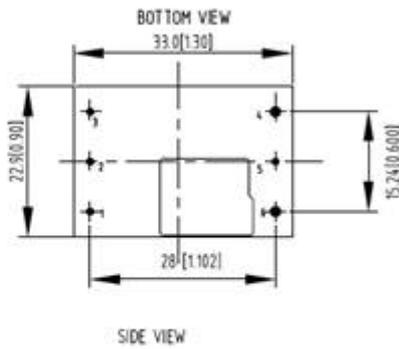
AVD200-48S12B-7TL



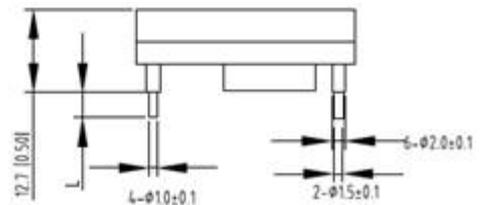
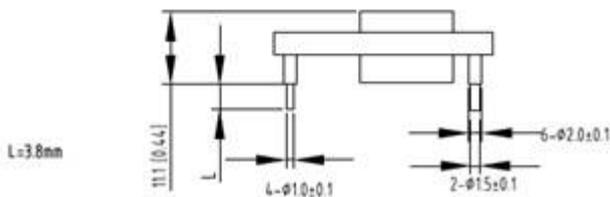
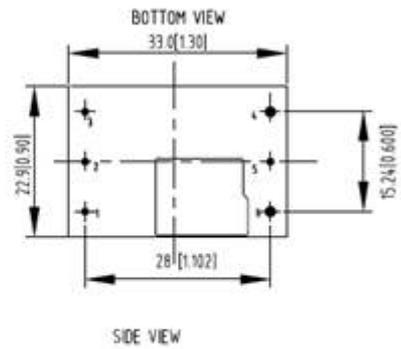
AVD200-48S12TL



AVD200-48S12-6L



AVD200-48S12B-6L



UNIT: mm (inch)  
 L: 1.60mm±0.25mm for AVD200-48S12(PB)-7TL; 3.80mm±0.25mm for AVD200-48S12(PB)-6L.  
 TOLERANCE: X.X mm±0.5mm [X.XX in.± 0.02in.]  
 X.XX mm±0.25mm[X.XXX in.±0.01in.]

## PIN LENGTH OPTIONS

Device code suffix	L
-4	4.8 mm ± 0.25 mm
-6	3.8 mm ± 0.25 mm
-8	2.8 mm ± 0.25 mm
-7	1.6 mm ± 0.25 mm
None	5.8 mm ± 0.25 mm

## PIN DESIGNATIONS

Pin No	Name	Function
1	Vin+	Positive input voltage
2	Remote On/Off	Remote control
3	Vin-	Negative input voltage
4	Vo-	Negative output voltage
5	Trim	Output voltage trim
6	Vo+	Positive output voltage



For international contact information,  
visit [advancedenergy.com](http://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

---

Specifications are subject to change without notice. Not responsible for errors or omissions. ©2021 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy®, AE® and Artesyn™ are U.S. trademarks of Advanced Energy Industries, Inc.