

AVE450/500 Series

50 Volts; 450/500 Watts

Data Sheet

Total Power: 450/500 Watts
Input Voltage: 36 - 75 V
of Outputs: Single

SPECIAL FEATURES

- 2:1 Wide input range
- Extra wide trim range 25 - 57 V for 50 Vo
- Optimised for high power density, small space applications
- Low ripple and noise
- Fixed switching frequency
- Super high efficiency
- High capacitive load capability
- Basic insulation system
- Aluminium substrate design

SAFETY

- UL, cUL: UL60950
- TUV/CE: IEC/EN60950



Electrical Specifications

Input	
Input range	36 - 75 Vdc
Efficiency	95%
Output	
Voltage	50 V \pm 1%
Current	9 A (AVE450) 10 A (AVE500)
Line regulation	\pm 0.5%
Load regulation	\pm 0.5%
Noise/ripple	120 mV
Overvoltage protection	Hiccup
Overtemperature protection	Auto-restart
Switching frequency	280 kHz
Temperature co-efficient	\pm 0.02/ $^{\circ}$ C
Isolation	
I/O isolation	2250 Vdc min.

Environmental Specifications

Operating ambient temperature range	-40 $^{\circ}$ C to +85 $^{\circ}$ C
Storage temperature	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Humidity	5% to 95% (non-condensing)
MTBF	1.5 Million hours
RoHS compliant	6/6

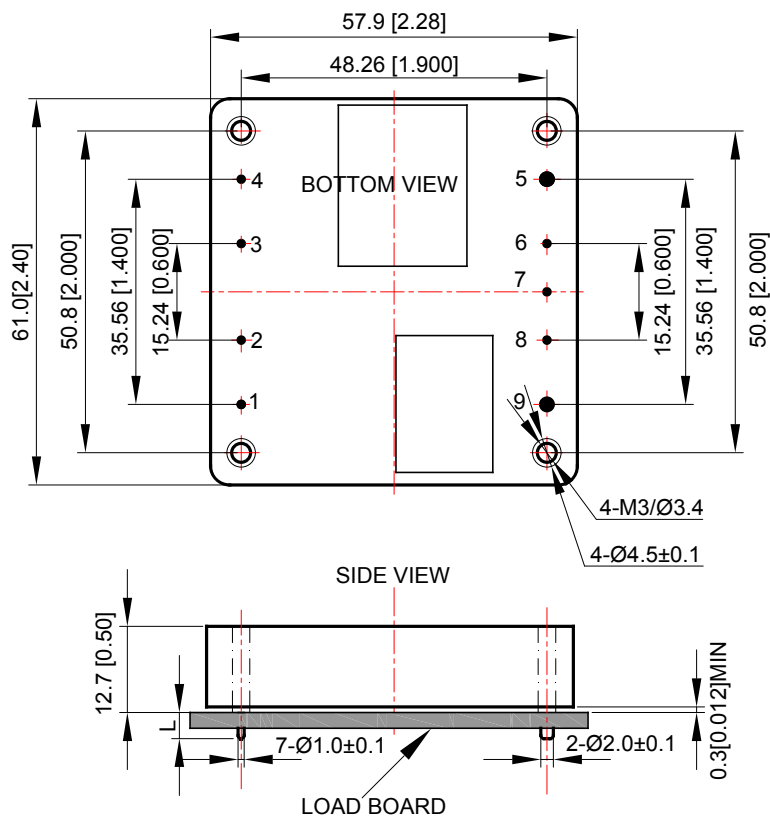
Ordering Information

Model number	Input voltage	Output voltage	Power
AVE450-48S50-6L	36 - 75 Vin	50 V @ 9 A	450 W
AVE450-48S50P-6L	36 - 75 Vin	50 V @ 9 A	450 W
AVE500-48S50-6L	36 - 75 Vin	50 V @ 10 A	500 W
AVE500-48S50P-6L	36 - 75 Vin	50 V @ 10 A	500 W

Standard version is negative enable

- 6 = 3.8 mm pin length
- L = RoHS 6/6 compliance
- M = Thread hole fixture
- P = Positive remote control

Mechanical Drawings



UNIT: mm[inch]

BOTTOM VIEW: pin on upside

TOLERANCE: X.Xmm±0.5mm[X.XX in.±0.02in.]

X.XXmm±0.25mm[X.XXX in.±0.01in.]

Pin Length Option

Device code suffix	L
-4	4.8 mm ± 0.5 mm
-6	3.8 mm ± 0.5 mm
-8	2.8 mm ± 0.5 mm
None	5.8 mm ± 0.5 mm

Pin Designations

Pin No.	Name	Function
1	V_{in+}	Positive input voltage
2	CNT	Remote ON/OFF control
3	Case	Case
4	V_{in-}	Negative input voltage
5	V_{o-}	Negative output voltage
6	S-	Negative remote sense
7	Trim	Output voltage trim
8	S+	Positive remote sense
9	V_{o+}	Positive output voltage

Notes:

1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 2 years
3. Label and logo appearance may vary from what is shown on mechanical drawings.

WORLDWIDE OFFICES

Americas

2900 S.Diablo Way
 Tempe, AZ 85282
 USA
 +1 888 412 7832

Europe (UK)

Waterfront Business Park
 Merry Hill, Dudley
 West Midlands, DY5 1LX
 United Kingdom
 +44 (0) 1384 842 211

Asia (HK)

14/F, Lu Plaza
 2 Wing Yip Street
 Kwun Tong, Kowloon
 Hong Kong
 +852 2176 3333



www.artesyn.com

Artesyn Embedded Technologies, Artesyn and the Artesyn Embedded Technologies logo are trademarks and service marks of Artesyn Embedded Technologies, Inc. All other names and logos referred to are trade names, trademarks, or registered trademarks of their respective owners. Specifications are subject to change without notice. © 2017 Artesyn Embedded Technologies, Inc. All rights reserved. For full legal terms and conditions, please visit www.artesyn.com/legal.

For more information: www.artesyn.com/power
 For support: productsupport.ep@artesyn.com