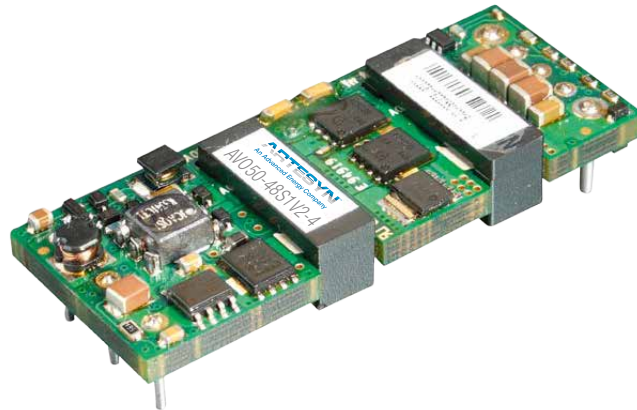


AVO50 Series

50 Watts

Data Sheet

Total Power: 50 Watts
Input Voltage: 36 - 75 Vdc
of Outputs: Single



SPECIAL FEATURES

- 2:1 Wide input range
- Optimised for High density, small space applications
- Low ripple and noise
- Fixed switching frequency
- High efficiency
- High capacitive load capability
- Basic insulation system
- Pre-bias start-up capability
- Open-frame structure

SAFETY

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

Electrical Specifications

Input	
Input range	36 - 75 Vdc
Efficiency	91% @ 3.3 V, 5 V and 12 V
Output	
Maximum power	+/-1% to +/-1.6%
Line regulation	5 V: 4 mV; 12 V: 9 mV; Others: 1 mV
Load regulation	5 V and 12 V: 5 mV; Others: 1 mV
Noise/ripple	1.2 V, 2.5 V, 3.3 V: 50 mV; 1.5 V, 5 V, 12 V: 55 mV; 1.8 V: 45 mV
Overvoltage protection Overtemperature protection	Auto-restart
Switching frequency	310 KHz
Temperature coefficient	$\pm 0.02 / ^\circ\text{C}$
Isolation	
I/O isolation	1500 Vdc min.

Environmental Specifications

Operating ambient temperature range	-40 °C to +85 °C
Storage temperature	-55 °C to +125 °C
Humidity	5% to 95% (non-condensing)
MTBF	2.5 Million hours
RoHS compliant	

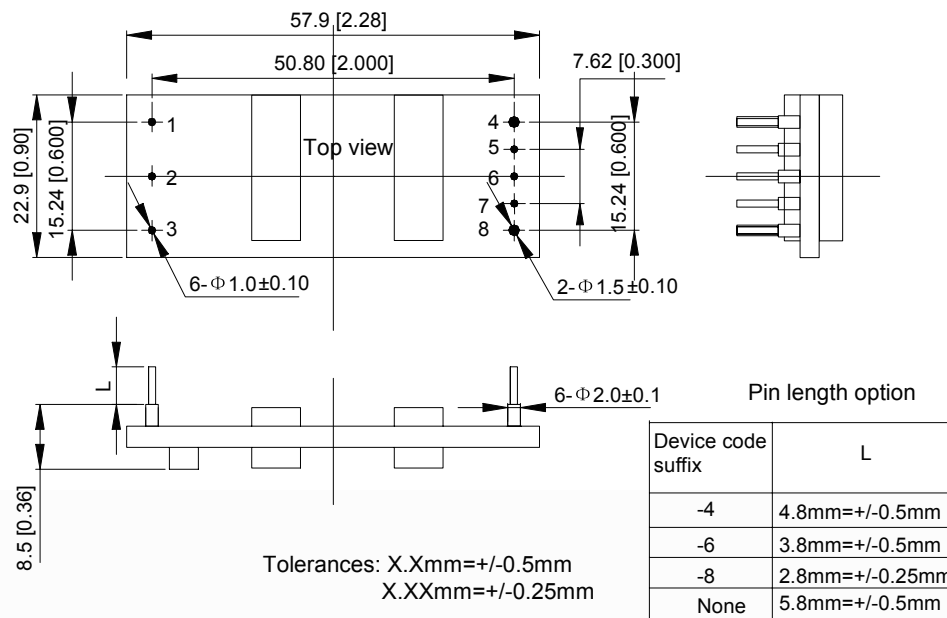
Ordering Information

Model number	Input voltage	Output voltage	Power
AVO50-48S1V2-4	36 - 75 Vin	1.2 V @ 20 A	24 W
AVO50-48S1V2P-4	36 - 75 Vin	1.2 V @ 20 A	24 W
AVO50-48S1V5-4	36 - 75 Vin	1.5 V @ 20 A	30 W
AVO50-48S1V5P-4	36 - 75 Vin	1.5 V @ 20 A	30 W
AVO50-48S1V8-4	36 - 75 Vin	1.8 V @ 20 A	36 W
AVO50-48S1V8P-4	36 - 75 Vin	1.8 V @ 20 A	36 W
AVO50-48S2V5-4	36 - 75 Vin	2.5 V @ 20 A	50 W
AVO50-48S2V5P-4	36 - 75 Vin	2.5 V @ 20 A	50 W
AVO50C-48S3V3-6L	36 - 75 Vin	3.3 V @ 15 A	49.5 W
AVO50C-48S3V3P-6L	36 - 75 Vin	3.3 V @ 15 A	49.5 W
AVO50-48S05-4	36 - 75 Vin	5 V @ 10 A	50 W
AVO50-48S12-6L	36 - 75 Vin	12 V @ 4.2 A	50 W
AVO50-48S12P-4	36 - 75 Vin	12 V @ 4.2 A	50 W

Notes:

- Standard version is negative enable
- 6 = 3.8 mm pin length
- 4 = 4.8 mm pin length
- P = Positive enable

Mechanical Drawings



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.

Pin Assignments

Pin #	Function	Function
1	+Vin	Positive input voltage
2	CNT	Remote control
3	-Vin	Negative input voltage
4	+Vout	Positive output voltage
5	+Sense	Positive remote sense
6	Trim	Output voltage trim
7	-Sense	Negative remote sense
8	-Vout	Negative output voltage

WORLDWIDE OFFICES

Americas

2900 South Diablo Way
Suite B100
Tempe, AZ 85282, USA
+1 888 412 7832

Europe (UK)

Ground Floor Offices, Barberry House
4 Harbour Buildings, Waterfront West
Brierley Hill, West Midlands
DY5 1LN, UK
+44 (0) 1384 842 211

Asia (HK)

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

ARTESYNTM
An Advanced Energy Company

www.artesyn.com

Artesyn Embedded Technologies, Artesyn Embedded Power, Artesyn, and all Artesyn related logos 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. © 2019 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
For support: productsupport.ep@artesyn.com

AV050 Series-DS Rev. 28Nov2019