

# ARTESYN AVO75 SERIES

75 Watts



Advanced Energy's Artesyn AVO75 series of eighth-brick isolated DC-DC converters comprises six single output models offering fully regulated voltages of 1.2 V, 1.8 V, 2.5 V, 3.3 V, 5.0 V or 12.0 V. These converters can deliver up to 25 amps and up to 75 watts of output power, depending on the particular model. They have a wide 2:1 input range of 36 to 75 Vdc and are designed primarily for use with standard 48 V telecommunications equipment supplies.

## DATA SHEET

### Total Power:

75 Watts

### Input Voltage:

36 - 75 V

### # 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

- TUV/CE 62368-1
- UL/cUL 60950-1



## ELECTRICAL SPECIFICATIONS

Input	
Input range:	36 - 75 VDC
Efficiency <sup>2</sup> :	91% @ 12V
Output	
Voltage tolerance:	+/-1.2% to +/-1.6%
Line regulation:	5V: 4mV; 12V: 9mV; Others: 1mV
Load regulation:	5V and 12V: 5mV; Others: 1mV
Noise/ripple:	3.3 Vo: 1.2V, 2.5V, 3.3V: 50mV; 5V, 5.0 Vo: 12V: 55mV; 1.8V: 45mV
Over voltage protection: Over temperature protection:	Auto-restart
Switching frequency:	310 KHz
Temperature coefficient:	±0.02/°C
Isolation	
I/O isolation	2000 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	

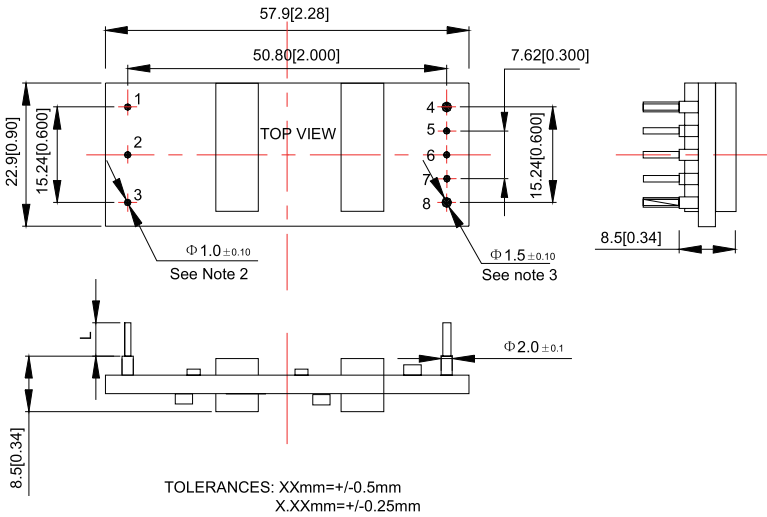
**ORDERING INFORMATION**

Model number	Input voltage	Output voltage	Power
AVO75-48S1V2-4	36 - 75 Vin	1.2V @ 25A	30W
AVO75-48S1V2P-4	36 - 75 Vin	1.2V @ 25A	30W
AVO75-48S1V8-4	36 - 75 Vin	1.8V @ 25A	45W
AVO75-48S1V8P-4	36 - 75 Vin	1.8V @ 25A	45W
AVO75-48S2V5-4	36 - 75 Vin	2.5V @ 25A	62.5W
AVO75-48S2V5P-4	36 - 75 Vin	2.5V @ 25A	62.5W
AVO75-48S3V3-4	36 - 75 Vin	3.3V @ 20A	66W
AVO75-48S05-4	36 - 75 Vin	5V @ 15A	75W
AVO75-48S05-6	36 - 75 Vin	5V @ 15A	75W
AVO75-48S05P-4	36 - 75 Vin	5V @ 15A	75W
AVO75-48S12P-4	36 - 75 Vin	12V @ 6.3A	75W

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

**MECHANICAL DRAWINGS**

Top & pin side view



## PIN LENGTH OPTION

Device Code Suffix	L
-4	4.8mm+/-0.5mm
-6	3.8mm+/-0.5mm
-8	2.8mm+/-0.25mm
NONE	5.8mm+/-0.5mm

## Notes:

1. Un-dimensioned components are for visual reference only.
2. Pins 1~3, 5~7 are 1.0mm diameter with 2.0mm diameter standoff shoulders.
3. Pins 4, 8 are 1.5mm diameter with no standoff shoulders.

## PIN DESIGNATIONS

Pin No.	Function	Pin No.	Function
1	+Vin	5	+Sense
2	CNT	6	Trim
3	-Vin	7	-Sense
4	+Vo	8	-Vo

## 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.



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## 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**

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