ARTESYN AVO120 SERIES

120 Watts



Advanced Energy's Artesyn AVO120 series eighth-brick isolated DC-DC converter is designed specifically to provide a regulated low noise 12 Vdc output for feeding downstream non-isolated point-of-load (POL) converters in systems with distributed power architectures (DPA). Rated at 120 watts, it can deliver up to 10 amps. The converter has a wide 2:1 input range of 36 to 75 Vdc and is designed primarily for use with standard 48 V telecommunications equipment supplies.

DATA SHEET

Total Power:

120 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
- Through-hole or SMT termination
- Open frame structure with baseplate option

SAFETY

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

RoHS 6/6 COMPLIANT

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ELECTRICAL SPECIFICATIONS

Input	
Input range	36 - 75 VDC
Efficiency[2]	93% @12 Vo
Output	
Maximum power	+/-1.6%
Line regulation	+/- 6 mV
Load regulation	+/- 10 mV
Noise/ripple	65 mV
Overvoltage protection Overtemperature protection	Auto-restart
Switching frequency	165 KHz
Temperature co-efficient	±0.02 /°C
Isolation	
I/O isolation	2000 VDC min.

ENVIRONMENTAL SPECIFICATIONS

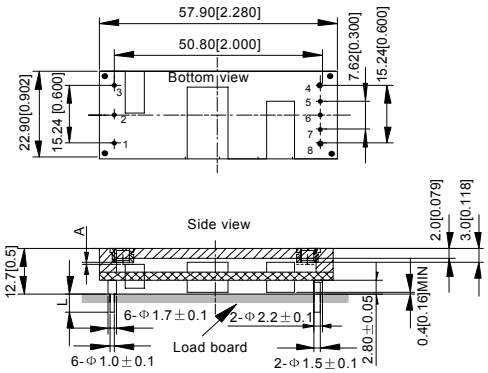
Operating ambient temperature range	-40 °C to +85 °C
Storage temperature	-55 °C to +125 °C
Humidity	5% to 95% (non-condensing)
MTBF	1.5 Million hours
RoHS compliant	

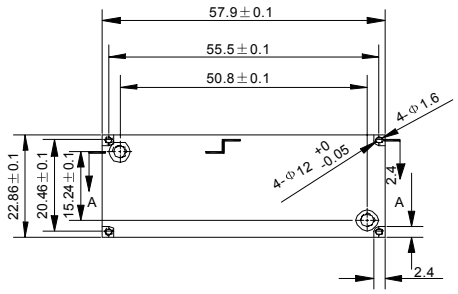
ORDERING INFORMATION

Model number	Input voltage	Output voltage	Power
AVO120-48S12-4L	36 - 75 Vin	12 V @ 10 A	120 W
AVO120-48S12-6L	36 - 75 Vin	12 V @ 10 A	120 W
AVO120-48S12B-4L	36 - 75 Vin	12 V @ 10 A	120 W
AVO120-48S12B-6L	36 - 75 Vin	12 V @ 10 A	120 W
AVO120-48S12P-4L	36 - 75 Vin	12 V @ 10 A	120 W
AVO120-48S12P-6L	36 - 75 Vin	12 V @ 10 A	120 W
AVO120-48S12PB-4L	36 - 75 Vin	12 V @ 10 A	120 W
AVO120-48S12PB-6L	36 - 75 Vin	12 V @ 10 A	120 W

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

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 DESIGNATIONS

Pin #	Function
1	+V in
2	Enable
3	-V in
4	-V out
5	- Sense
6	Trim
7	+Sense
8	+V out

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

For international contact information,
visit advancedenergy.com.

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

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