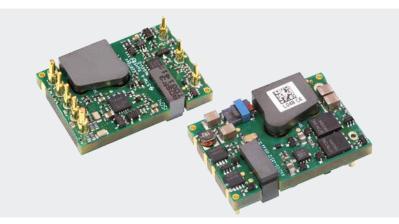


# ARTESYN AVD100 SERIES

100 - 120 Watts



Advanced Energy's Artesyn AVD100 series of sixteenth-brick isolated DC-DC converters comprises two single output models offering fully regulated voltages of 5.0 V or 12 V, rated at 20 amps, 10 amps respectively. Both of the converters 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. Rated at 100 watts, they employ an open-frame construction, offer up to 91% full load efficiency and accommodate an ambient operating temperature range of -40 to 85°C. A baseplate option is available for enhanced thermal performance. The converters use 250 kHz fixed frequency switching to minimize the need for external EMI filtering.

#### **DATA SHEET**

#### **Total Power:**

100 - 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
- Pre-bias start-up capability
- Basic insulation system
- Through-hole or SMT termination

- Openframe structure with Baseplate option
- Output over current protection

#### **SAFETY**

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

### **ELECTRICAL SPECIFICATIONS**

Input		
Input range	36 - 75 Vdc	
Efficiency	5 V: 92.5% @ full load; 93.5% @ half load	
Output		
Voltage tolerance	+1.5%	
Line regulation	0.2%	
Load regulation	Single output: 0.5%	
Noise/ripple	120 mV	
Overvoltage protection Overtemperature protection	Auto-restart	
Switching frequency	250 KHz	
Temperature co-efficient	±0.02 /°C	
Isolation		
I/O isolation	1500 Vdc min.	

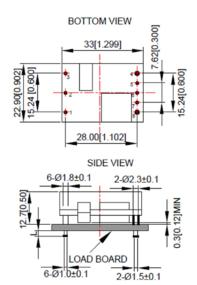
#### **SPECIFICATIONS**

Operating ambient temperature range	-40 °C to +85 °C	
Storage temperature	-55 °C to +125 °C	
Humidity	5% to 95% (non-condensing)	
MTBF	2 Million hours	
RoHS compliant		

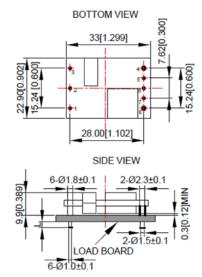


#### **MECHANICAL DRAWINGS**

#### **Baseplate option**



Open frame option



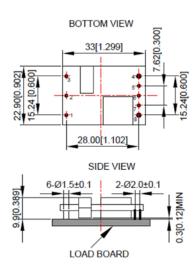
UNIT: mm[inch] BOTTOM VIEW: pin on upside

TOLERANCE: X.Xmm±0.5mm[X.XX in.±0.02in.] X.XXmm±0.25mm[X.XXX in.±0.01in.]

#### 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.

#### **SMT** option





### **PIN LENGTH OPTIONS**

Device code suffix	L		
-4	4.6 mm ± 0.25 mm		
-6	3.8 mm ± 0.25 mm		
-8	2.8 mm ± 0.25 mm		
None	5.8 mm ± 0.25 mm		

### **PIN DESIGNATIONS**

Pin #	Function	
1	+V in	
2	Remote On/Off	
3	-V in	
4	-V out	
5	- Sense	
6	Trim	
7	+Sense	
8	+V out	

### **ORDERING INFORMATION**

Model number	Input voltage	Output voltage	Power
AVD100-48S05-6L	36 - 75 Vin	5 V @ 20 A	100 W
AVD100-48S05B-6L	36 - 75 Vin	5 V @ 20 A	100 W
AVD100-48S05TL	36 - 75 Vin	5 V @ 20 A	100 W
AVD120-48S12-6L	36 - 75 Vin	12 V @ 10 A	120 W
AVD120-48S12B-6L	36 - 75 Vin	12 V @ 10 A	120 W
AVD120-48S12TL	36 - 75 Vin	12 V @ 10 A	120 W

Notes:
Standard version is negative enable
"\_6" = 3.8 mm pin length
"B" = Baseplate version
"T" = Surface mount, reel tape package
"L" = RoHS 10 compliance
"P" = Positive enable





#### **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. ©2020 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy®, AE® and Artesyn™ are U.S. trademarks of Advanced Energy Industries, Inc.



For international contact information, visit advancedenergy.com.

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

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Isolated DC/DC Converters category:

Click to view products by Artesyn Embedded Technologies manufacturer:

Other Similar products are found below:

ESM6D044440C05AAQ FMD15.24G PSL486-7LR Q48T30020-NBB0 JAHW100Y1 SPB05C-12 SQ24S15033-PS0S 18952 19-130041
CE-1003 CE-1004 GQ2541-7R RDS180245 MAU228 J80-0041NL DFC15U48D15 XGS-0512 XGS-1205 XGS-1212 XGS-2412 XGS2415 XKS-1215 06322 NCT1000N040R050B SPB05B-15 SPB05C-15 L-DA20 DCG40-5G QME48T40033-PGB0 XKS-2415 XKS-2412
XKS-1212 XKS-1205 XKS-0515 XKS-0505 XGS-2405 XGS-1215 XGS-0515 PS9Z-6RM4 73-551-5038I AK1601-9RT VI-N61-CM VIR5022-EXWW PSC128-7iR RPS8-350ATX-XE DAS1004812 PQA30-D24-S24-DH VI-M5F-CQ VI-LN2-EW VI-PJW01-CZY