

## AVO200 Series

200 Watt 1/8<sup>th</sup> Brick DC/DC Converter

### Data Sheet

**Total Power:** 200 W  
 (12 V @ 16.7 A)  
 (5 V @ 40 A)  
**Input voltage:** 36 - 75 Vdc  
**Single output:** 12 V, 5 V

### SPECIAL FEATURES

- 200 W continuous power
- Ultra high efficiency up to 94.5%
- Telecom DC input range
- Base-plate optimised for contact cooling
- Open frame optimised for air-cooling
- Low ripple and noise
- Fixed switching frequency
- High capacitive load capability
- Pre-bias start-up capability
- Through hole and surface mount termination option
- High reliability
- RoHS-6 compliant
- UL94 V-0 materials

### SAFETY

- EN60950
- CSA
- CE

### WARRANTY

- 2 Years (Consult factory for extended Terms)



### Electrical Specifications

Input	
Input voltage	36 - 75 Vdc
Input Surge	100 V / 100 mSec
Efficiency	12 V at 100% load is 94% 5 V at 100% load is 94.5%
I/O insulation I/O isolation	Basic insulation, 1500 Vdc
Output	
Output Voltage	12 V nominal 5 V nominal
Output current maximum	16.7 A for 12 V version 40 A for 5 V version
Noise & ripple	12 V is 70 mV pk-pk max 5 V is 120 mV pk-pk max
Over Temperature protection -Baseplate -Open frame	110 degC baseplate 120 degC hot-spot
Over voltage protection Method / OVP operation	Auto restart /130% Vout
Over current protection Method / OCP operation	Hiccup / 150% Iout
Control	
Enable	TTL compatible (negative logic)
Trim function	80% to 110% Vout
Remote sense	Sense connections provided
Switching Frequency	150 Khz

### Ordering Information

Model number	Input voltage	Output voltage set point	Output current	Efficiency
AVO200-48S05B-6L	36-75 Vdc	5 V / 40 A	40 A	94.5%
AVO200-48S05-6L	36-75 Vdc	5 V / 40 A	40 A	94.5%
AVO200-48S05PB-6L	36-75 Vdc	5 V / 40 A	40 A	94.5%
AVO200-48S12B-4L	36-75 Vdc	12 V / 17 A	16.7 A	94.0%
AVO200-48S12B-6L	36-75 Vdc	12 V / 17 A	16.7 A	94.0%
AVO200-48S12-6L	36-75 Vdc	12 V / 17 A	16.7 A	94.0%

Default = Negative remote control

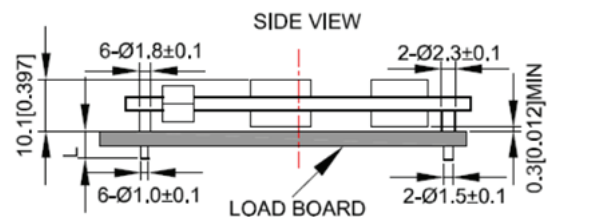
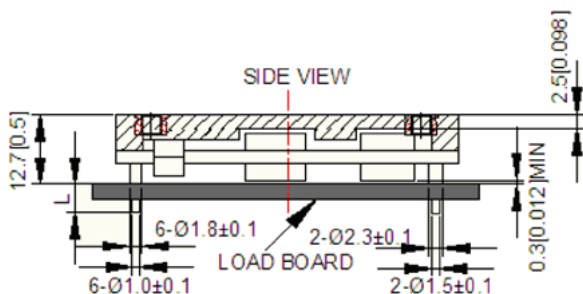
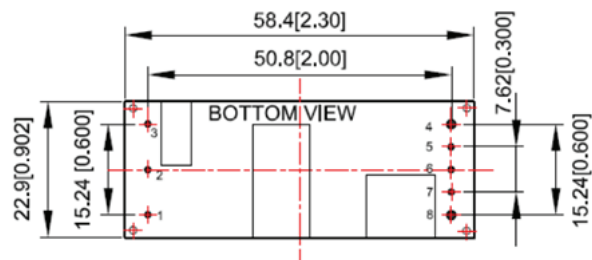
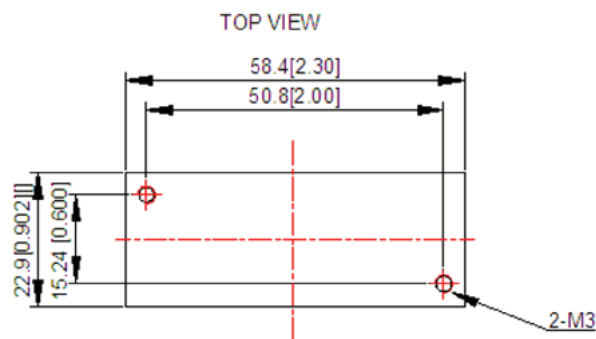
P = Positive remote control

B = Baseplate

-6 = 3.8 mm pin length

-4 = 4.8 mm pin length

### Mechanical Drawings



UNIT: mm[inch]

BOTTOM VIEW: pin on upside

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

X.XXmm±0.25mm[X.XX in.±0.01in.]

Notes:

1. Dimensions within the box are critical dimensions.
2. AVO200 5 V and 12 V products have slight difference in the mechanical drawing. Please check the specified product's Technical Reference Note for more details.
3. All specifications are subject to change without notice. Mechanical drawings are for reference only.

### Pin Length Options

Device code suffix	Pin Length
-4	4.8 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 (AVO200)

Pin No.	Name	Function
1	V <sub>in+</sub>	Positive input voltage
2	Remote ON/OFF	Remote control
3	V <sub>in-</sub>	Negative input voltage
4	V <sub>o-</sub>	Negative output voltage
5	S-	Negative remote sense
6	Trim	Output voltage trim
7	S+	Positive remote sense
8	V <sub>o+</sub>	Positive output voltage

### Environmental Specifications

Operating temperature	-40 to +85 °C
Storage temperature	-55 to +125 °C
MTBF	1.5 million hours

### 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



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 For support: [productsupport.ep@artesyn.com](mailto:productsupport.ep@artesyn.com)