

ADH700 Series

700 Watt Half-Brick DC-DC Converter

Data Sheet

Total Power: 700 Watt
(28 V @ 25 A)
Input Voltage: 36 - 65 Vdc
Single Output: 28 V Nom

SPECIAL FEATURES

- 700 W continuous power
- Ultra high efficiency 95% @ 100% load
- 36 - 65 Vdc Telecom input range
- Contact cooling or heatsink mounting
- Excellent thermal performance
- Remote output sense
- Fully regulated output voltage
- No minimum load requirement
- Remote control function
- Low ripple and noise
- Fixed switching frequency
- Trim function: 50% ~118%
- High reliability
- RoHS 6 compliant
- UL94 V-0 materials
- Output overcurrent protection
- Output shortcircuit protection
- Output overvoltage protection
- Overtemperature protection
- Industry standard half-brick
- Two year warranty (consult factory for extended terms)

SAFETY

- EN60950
- CSA
- CE
- UL



Electrical Specifications

Input	
Input voltage	36 - 65 Vdc
Input surge	100 V / 100 mSec (Non-operation)
Input UVLO	Turn-on: 34 Vdc typical Turn-off: 32 Vdc typical Hysteresis: 2 Vdc typical
I/O insulation	Basic insulation
I/O isolation	1500 Vdc
Efficiency (48 Vin, 25 °C ambient)	95% @ 100% load 95% @ 100% load
Output	
Output voltage (Vin = 48 V)	28 V
Output current maximum	25 A
Noise & ripple	130 mV pk-pk typical
Overtemperature protection	115 °C typical
Overvoltage protection method / OVP operation	35 - 42 V window / Hiccup and auto restart
Overcurrent protection method / OCP operation	26.5 - 35 A window / Hiccup and auto restart
Control	
Enable	TTL compatible
Switching frequency	280 KHz fixed frequency

Environmental Specifications

Operating temperature	-40° C to +85 °C
Storage temperature	-55 °C to +125 °C
MTBF	2 million hours

Ordering Information

Model number	Input voltage	Output voltage set point	Output current	Efficiency
ADH700-48S28-6L	36 - 65 Vdc	28 Vdc	25 A	95% (100% load)
ADH700-48S28P-6L	36 - 65 Vdc	28 Vdc	25 A	95% (100% load)

B = Baseplate
 -6 = 3.8 mm pin length
 P = Positive logic control

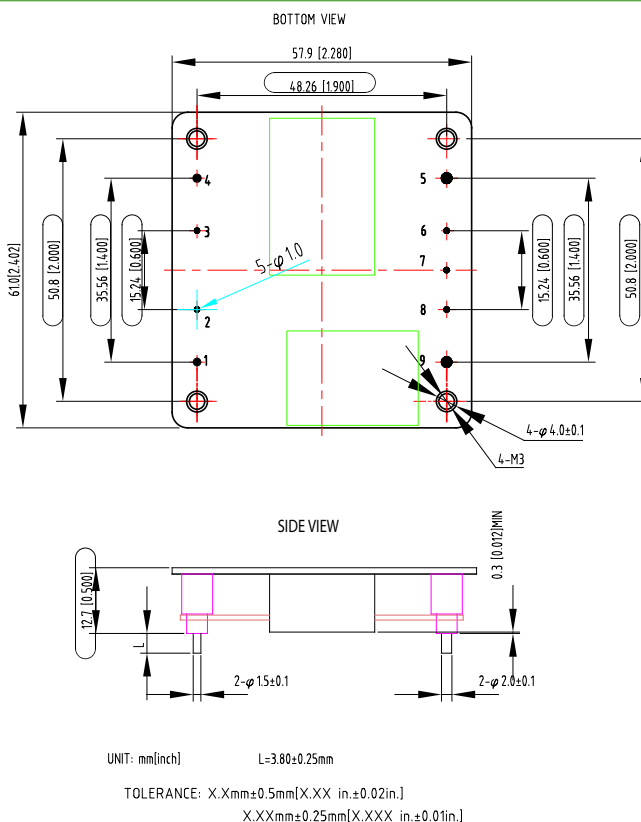
Pin Length Options

Device code suffix	L
-4	4.6 mm ± 0.5 mm
-6	3.8 mm ± 0.5 mm
-8	2.8 mm ± 0.5 mm
None	5.8 mm ± 0.5 mm

Pin Designations

Pin	Function	Function
1	Vin+	Positive input voltage
2	CNT	Remote ON/OFF control
3	Case	Case
4	Vin-	Negative input voltage
5	Vo-	Negative output sense
6	S-	Negative output sense
7	Trim	Output voltage trim
8	S+	Positive output sense
9	Vo+	Positive output voltage

Mechanical Drawing



Notes: Dimensions within the box are critical dimensions.

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



www.artesyn.com

Artesyn Embedded Technologies, Artesyn and the Artesyn Embedded Technologies logo 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. © 2018 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/power
 For support: productsupport.ep@artesyn.com