

## 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  
 Digital interface option

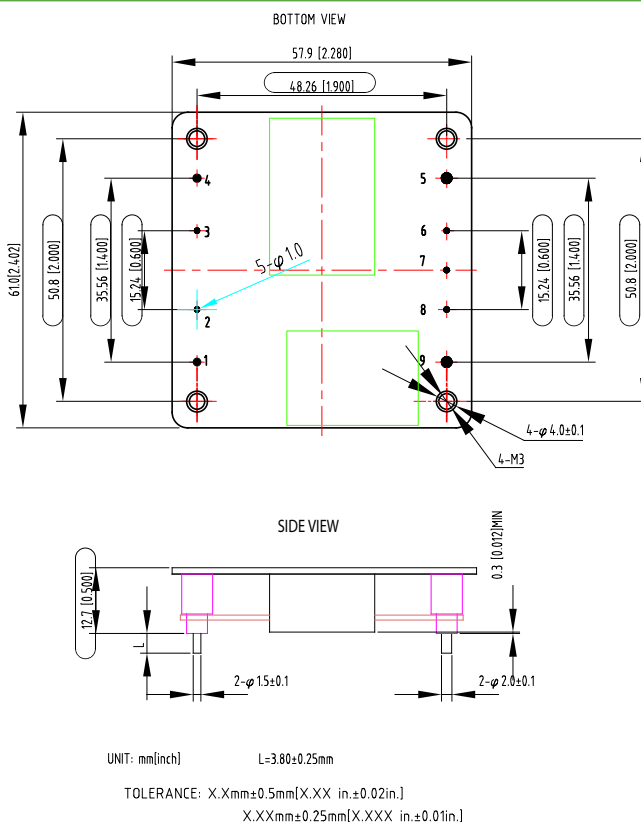
### Pin Length Options

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. © 2016 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](http://www.artesyn.com/power)  
 For support: [productsupport.ep@artesyn.com](mailto:productsupport.ep@artesyn.com)