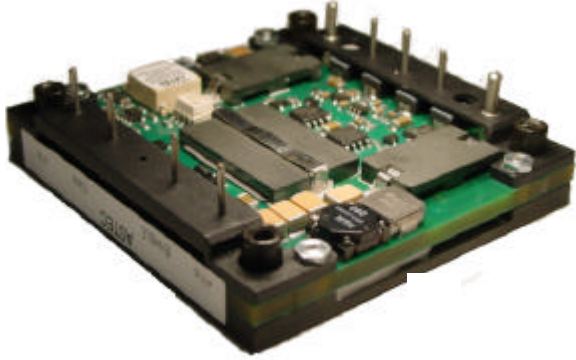


# 350W

## AEH30

### Ultra High Efficiency



Total Power: 350 Watts (12V @ 29.17A)  
 Input Voltages: 48 V  
 No. of Outputs: Single

### Electrical Specs

#### Input

Input range 36-75 VDC  
 Input Surge 100V / 100ms  
 Efficiency<sup>1</sup> 92.7% @ 12V (Typical)

#### Control

Enable TTL compatible  
 (positive or negative enable logic control options)

#### Output

Regulation (Line, Load, Temp) <2%  
 Ripple and Noise<sup>2</sup> 120mVpk-pk typical  
 Remote Sense Up to 10%Vout  
 Output Voltage Adjust Range<sup>3</sup> ±10% of nominal output  
 Transient Response 700mV output deviation  
 50% to 75% step load  
 500 μS recovery time

Overvoltage Protection 115% V<sub>O</sub> Typ (Latching)  
 Overcurrent Protection 115% I<sub>O</sub> Typ (Latching)  
 Over Temperature Protection 115°C Baseplate Temperature (autorecovery)  
 Isolation Voltage 1500 Vdc

### Special Features

- High efficiency, 12V@ 92.7% (Typical)
- Industry Standard Half Brick baseplate design
- Low output ripple and noise
- High capacitive load limit on start-up
- Remote sense compensation
- Regulation to zero load
- Fixed frequency switching
- Industry standard features: OCP, OVP, OTP, Short circuit protection, Trim, Remote Sense
- Positive or Negative enable logic control option
- Meets Basic Insulation

### Environmental

Operating temperature: -40°C to +100°C Baseplate  
 Storage temperature: -55°C to +125°C  
 MTBF: >1 million hours

### Safety

UL, cUL 60950 Recognized  
 TUV EN60950 Licensed

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AEH30B48

## Ordering Information

Input Voltage	Output Voltage	Efficiency	Model Number
48V	12V @ 29.17A	92.7%	AEH30B48
48V	12V @ 29.17A	92.7%	AEH30B48N

OPTION: suffix "N" = Negative Enable  
 no suffix "N" = Positive Enable (default)

## Pin Assignments

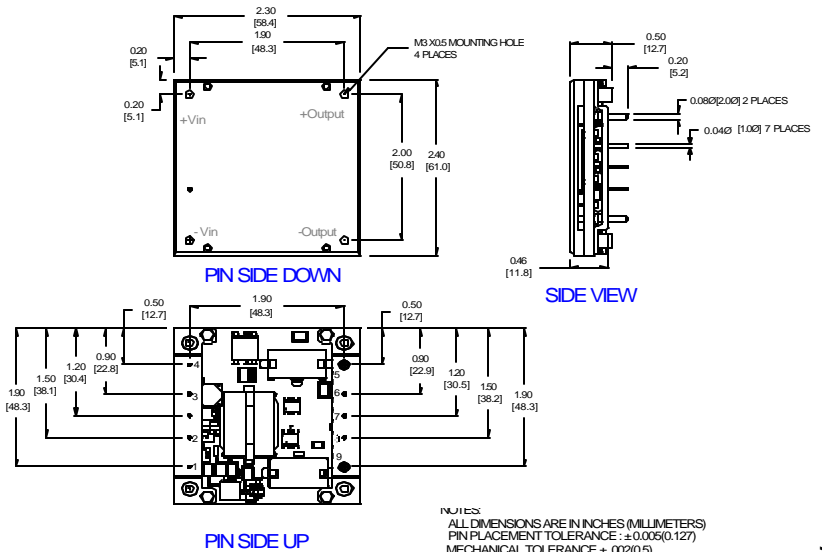
### Single Output

1. +Vin
2. Enable (On/Off)
3. Case (AEH)
4. -Vin
5. - Output
6. - Sense
7. Trim
8. + Sense
9. + Output

Notes:

1. Typical efficiency measurement taken at nominal line, full load, 25°C ambient.
2. 20 MHz BW with external 10uF/25V tantalum in parallel with 0.1uF/50V X7R ceramic capacitor placed across the output.
3. Total output power not to exceed 350W.
4. Requires a 2.2 uf, 100V film capacitor connected between +V in and -V in to meet FCC class A and ETS300-386-1 requirements for conducted noise. Consult Factory for filtering information to meet FCC class B, VDE or EIC specifications.
5. All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
6. All specifications subject to change without notice. Mechanical drawings are for reference only.
7. Technical Reference Notes should be consulted for detailed information.
8. Warranty: 1yr.

\* Astec reserves the right to make changes to the information contained herein without notice and assumes no liability as a result of its use or application. (REV A: AUGUST 25, 2005)



Astec Industry Standard