



# 60 WATT SINGLE OUTPUT

Vehicular, Industrial  
DC/DC Converters



## Specifications

All specifications are typical at nominal input, full load, and 25°C , unless otherwise noted.

### INPUT

Input Voltage Range.....See Model Selection Guide  
Input Filter.....Pi Network  
Reflected Ripple Current.....75mA p-p

### OUTPUT

Voltage Accuracy.....±2% max.  
Line Regulation .....±0.5% max.  
Load Regulation.....±0.5% max.  
Ripple Noise (20 MHz Bw).....1% Vp-p max.  
Temperature Coefficient .....0.02% /°C  
Temperature Coefficient Balance.....±1%  
Protection.....Continuous Short Circuit Protection  
Overvoltage Protection Threshold.....15V

### GENERAL

Efficiency.....82-85% Typical, See Chart  
Isolation Voltage.....1600 Vdc, min.  
Isolation Resistance.....1000MOhms  
Switching Frequency.....200KHz, typ.

### ENVIRONMENTAL

Operating Temperature Range.....-25 to +71°C  
Storage Temperature Range.....-55 to +125°C  
Cooling .....Free Air Convection  
EMI / RFI.....Six-sided Continuous Shield

### PHYSICAL

Case Material.....Aluminum  
Dimensions.....6.00" x 3.00" x 1.70"  
(152.4 x 76.2 x 1.7mm)  
Input and Output Cord.....6 ft. (UL) E3462  
(CSA) LL787414-2SJTOW 105°C

\* The output can be terminated to your specifications.  
Call factory for details.

## FEATURES

- Durable for Vehicular Applications
- Heavy Duty Aluminum Case
- Weather Proof On/Off Switch
- Heavy Duty Input/ Output Cables \*
- 4:1 Input Voltage Range (9-36 Vdc, 16-72 Vdc)
- Efficiency to 85%
- Over-Voltage Protection
- Internal Pi Filter
- Six-Sided Shield

AICP60 Series

## Selection Guide

(Continued)

SINGLE	Input Voltage Nominal (Range) (Vdc)	Output Voltage (Vdc)	Output Current (A)	Efficiency %	Model Number	Package	
	9-18	12	5	82	AICP60-12S12	S	
	9-36	12	5	82	AICP60-12S12W	S	
	36-72	12	5	85	AICP60-48S12	S	
	16-72	12	5	85	AICP60-48S12W	S	

## Mechanical Specifications

I/O Connections	
INPUT (2 CONDUCTORS)	OUTPUT (3 CONDUCTORS)
+Vin = Blue	+Vout = Blue
-Vin = Brown	-Vout = Brown
	Case = Green/Yellow

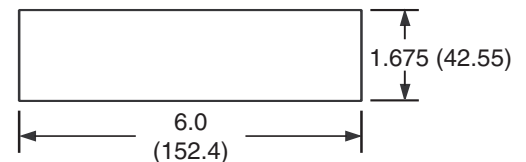
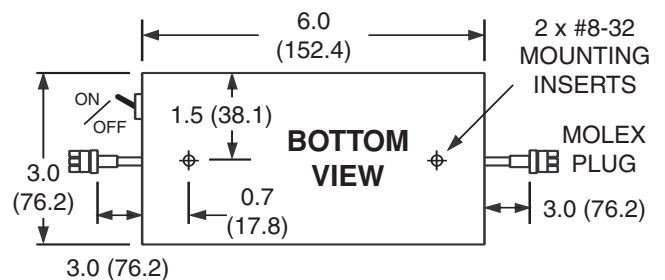
Units are supplied with input and output cables in 6ft lengths.

The input and output cables are connected to the module by molex plugs. Each of the three parts can be changed independently of the others. The input/output cables also have a nylon chafe guard for abrasion resistance. The input cable battery side is supplied stripped and tinned.

**NOTE**

INPUT/OUTPUT CABLES AND MODULE AVAILABLE INDIVIDUALLY

UNIT HAS MOLEX PLUGS TO CONNECT INPUT/OUTPUT CABLES.



All Dimensions are in inches (mm)



**POLYTRON DEVICES, Inc.**

P.O. Box 398, Paterson, New Jersey 07544 U.S.A.  
Tel: (973)345-5885 Fax: (973)345-1264 • Email: sales@polytrondevices.com • www.polytrondevices.com