

# 60W, TRIPLE OUTPUT DC/DC CONVERTER MIP 320 SERIES

for Mobile Computers and other applications



The MIP 320 series is an electrically and mechanically rugged converter designed to power computers and instrumentation in mobile applications such as cars, trucks and trains. The typical outputs are 5V and +/-12V and other output configurations are also available. All three outputs are individually regulated and current limited to meet stringent requirements for professional applications. The standard 160W version is conduction cooled, and can easily be converted to forced air cooling. The MIP320 can be customized to achieve 200W with sufficient cooling, such as forced air. The MIP 320 is manufactured in North America and is of very high quality, yet competitively priced. It meets common approval requirements, is fully protected and available within a short delivery time.

## SPECIFICATIONS

### Input Voltage

12V , 24, 36V and 48 V DC are standard. Custom inputs available

### Input Protection

Thermal Fuse  
Inrush current limiting

### Input Isolation/safety

1500VDC input to chassis input to 1500VDC input to output 500VDC output to chassis

Compliance to IEC950, CSA22.2-950 and UL1950

### Output Voltages

5.1V/10, 12V/5A, -12V/1A,  
Consult factory for other voltages

### Efficiency

Min 76% at full load

### Line/Load Regulation

+/-1% combined from no load to full load for all outputs

### Output Overvoltage Protection

Double regulator loop and Transzorb clamp

### Overload Protection

Current limiting with short circuit protection on all outputs

### EMI

Meets EN 55022 Class A

### Output Ripple/Noise

Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20HZ BW)

### Operating Temperature

-40 to +50°C (depending on available cooling)

### Temperature Drift

0.03% per °C over operating temperature range

### MTBF

100,000 at 45°C

### Dimensions

PCB Size: 4.2" x 7.0"  
Component height: 1.2"

### Connections and Packaging:

Open PCB version:  
Header pins with 0.156" spacing

### Warranty

Twelve months subject to application within good engineering practice

Enhancements to these general specifications and customizing can be accommodated upon request.  
Designed to meet common approval requirements. Specifications subject to change.

**Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Standard or custom.**

**Absopulse is a BAPT approved facility.**

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