

**ACS-5190 PSU 90W****DATA SHEET****Features****Environmental**

Operating Temperature: -50°C to +70°C (at 5V@18A)

Storage Temperature: -55°C to +120°C

Operating Humidity: 50-90% Non-Cond.

Storage Humidity: 100% Non-Cond.

Operating Altitude: 10,000ft ASL

Storage Altitude: 20,000ft ASL

Cooling: Circulated air required at loads 10A and above

**Electrical**

Input Requirements: + 9-60VDC

Output Requirements: +5V @ 18A continuous output

+12V @ 2.5A

-5V @ 500mA

-12V @ 500mA

Output Ripple: Less than 300mV at rated currents

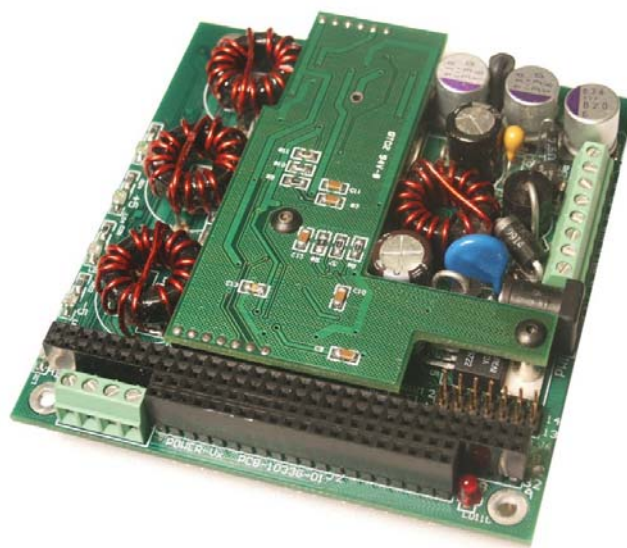
Output Power: 70W Convection-cooled at 25C

90W Force-cooled at 25C

Input Protection: Transient, Over-current, Diode polarity reversal

Output Protection: 5VDC over-voltage

Efficiency: DC-DC Conversion: &gt;90% Efficient on +5VDC

**General Description**

The ACS-5190 is a 90-watt, 90+ percent efficient DC-to-DC conversion board with intelligent power management features. With an analog to digital converter and onboard temperature sensor, the board offers 12-bit external voltage input and local temperature monitoring, as well as intelligent shutdown capabilities.

Fully complying with PC/104 form factor requirements, the ACS-5190 offers an embedded system with a highly efficient power supply that integrates a wide input voltage range (9-60 volts), high current capacity (18 Amp continuous), and quad output voltages ( $\pm 5$ ,  $\pm 12$  VDC) brought to the PC/104 bus for usage. Input voltage is supplied to the board through a removable screw clamp connector or a barrel jack and is protected against diode polarity reversal, over-current, and transients. The +5VDC output is also protected against over-voltage and over-current. A mezzanine provides negative voltages and battery charging (5 hour charge). Five LEDs on the board indicate the output status of all four voltages and battery charger.

The module can deliver 90 watts of power at temperatures of -40°C to +70°C when circulated air is applied.