



### HE104-75W - 75 Watt High Efficiency PC/104

#### FEATURES

- 75 Watt output
- +5V, +12V, -12V outputs
- 6V to 40V Dc input range
- PC/104 compliant
- Extended temperature: -40°C to +85°C
- Size (W x L x H): 3.55" x 3.75" x 0.06"



#### FUNCTIONAL DESCRIPTION

The HE104-75W is a high efficiency, high performance DC-to-DC converter that supplies +5V, +12V & -12V outputs to the PC/104 bus. The HE104-75W is designed for low noise embedded computer systems, has a wide input range of 6-40V(>6:1) and is ideal for battery or unregulated input applications. The HE104-75W is specifically designed for vehicular applications and has heavy-duty transient suppressors (9000W on main input) that clamp the input voltage to safe levels, while maintaining normal power supply operation.

The HE104-75W is a state-of-the-art Mosfet based design that provides outstanding line and load regulation with efficiencies up to 90 percent. Organic Semiconductor Capacitors provide filtering that reduces ripple noises below 20mV. The low noise design makes the HE104-75W ideal for use aboard aircraft or military applications or wherever EMI or RFI must be minimized. The +5VDC and +12VDC outputs are controlled by a constant frequency architecture regulator that provides excellent line and load transient response.

The HE104-75W has an opto-coupled on/off input (SD) to control the outputs of the HE104-75W. To enable the HE104-75W outputs, a 6 to 40V signal must be connected to the SD input. If remote control is not required, the SD input can be connected to the main power input. The common for the remote 6 to 40V signal must be connected to the HE104-75W common. If the SD input is connected directly to the main input power connector, the common for the SD input is already done.



### Specifications

#### Electrical Specifications

- 5V output 15A
- 12V output 3A
- -12V output 0.5

#### Input Voltage

- 6 to 40V

#### Mechanical/Environmental

- Temperature Range -40 to 85C
- PC/104 compliant
- 3.55"W x 3.75"L x 0.6"H
- Weight 6.08 oz/172.37 grams

#### Performance Characteristics

- Load Regulation (5V output) <60mV
- Line Regulation 40mV
- Output temp. drift (5V output) <40mV
- Switching Freq. 75kHz
- Max. Input Transient 125V for 100msec
- Output Ripple (5V output) <20mV
- Conducted Susceptibility (5V output) >57db
- Efficiency (5V output) Up to 90%

### Ordering Information

HE104-75W

+5V, +12V, -12V DC outputs, 75  
Watt power supply