Compact and lightweight, the 250 VA Model 1716 dc-to-ac inverter is designed to perform equally well in stationary and mobile applications. The inverter provides an isolated, well regulated 120-Vac, frequency-stable 60-Hz quasi-sine-wave output and is available in 12, 24, 48 and 130-Vdc input versions. The conservatively rated Model 1716 is well suited for powering a variety of loads, from sensitive electronic equipment to small motors and other nonlinear loads.

### SPECIFICATIONS

**Input Voltage and Current**
- The nominal input voltage, the input voltage range, the no-load input current and the full-load input current are shown in Table 1.

**Output Voltage**
- 118 Vac nominal

**Frequency**
- 60 Hz nominal ±0.05 Hz maximum variation over the full range of load and input voltage changes. Temperature coefficient is ±0.02% maximum per °C.

**Volt-Ampere Rating**
- 250 VA

**Output Voltage Regulation**
- ±0.2% versus dc input line
- ±2.0% versus load

1 As measured with a conventional average-responding, rms-calibrated voltmeter

**Operating Temperature Range**
- For 24, 48 and 130-Vdc input versions: -30°C to +50°C
- For 12-Vdc input versions: -30°C to +30°C (for operation up to +50°C, derate the output volt-ampere rating linearly to 175 VA)

**Storage Temperature Range**
- -40° C to +95°C

**Output Voltage Wave Shape**
- Three-level stepped approximation to a sine wave with peak, average and rms values approximating those of a sine wave.

**Protection**
- Protection against overloads and accidental short-circuit of the output is provided electronically, and recovery is automatic upon removal of the abnormal load. A front-panel circuit breaker in series with the dc input provides protection against accidental reversal of input polarity during installation.

### Table 1

<table>
<thead>
<tr>
<th>Nominal Input Voltage (Vdc)</th>
<th>Input Voltage Range (Vdc)</th>
<th>Input Current No Load2 (Adc)</th>
<th>Input Current Full Load3 (Adc)</th>
<th>Efficiency3</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>10.5-16</td>
<td>0.28</td>
<td>28.6</td>
<td>83%</td>
<td>1716-12-120-60</td>
</tr>
<tr>
<td>24</td>
<td>21-29</td>
<td>0.13</td>
<td>13.9</td>
<td>86%</td>
<td>1716-24-120-60</td>
</tr>
<tr>
<td>48</td>
<td>42-58</td>
<td>0.07</td>
<td>6.8</td>
<td>88%</td>
<td>1716-48-120-60</td>
</tr>
<tr>
<td>130</td>
<td>105-145</td>
<td>0.04</td>
<td>2.7</td>
<td>88%</td>
<td>1716-130-120-60</td>
</tr>
</tbody>
</table>

2 Typical at no load and nominal input voltage

3 Typical at full load and minimum input voltage

**DC/AC INVERTER**

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DESIGNERS AND MANUFACTURERS OF SOLID-STATE POWER CONVERSION EQUIPMENT