2,200-VA DC-TO-AC INVERTER
115-VAC SINE-WAVE OUTPUT

Designed for space-limited applications within the telecommunications, data processing and utility industries, the Model 1747 dc-to-ac inverter provides up to 2,200 volt-amperes in only 3.5 inches of vertical rack space. The inverter produces a well-regulated 115-Vac, frequency-stable 60-Hz sine-wave output (50Hz models are also available) from station batteries or other dc sources. Standard versions permit operation from either positive or negative 24-Vdc, 48-Vdc or 130-Vdc sources because the dc input is galvanically isolated from the ac output and from the chassis. The inverter is compact, lightweight and compatible with either 19-inch or 23-inch equipment racks.

The Model 1747 is well-suited for powering a variety of loads, from sensitive communications and SCADA/telemetry equipment to loads normally considered difficult for inverters, including small motors and other reactive or high-surge loads. With the addition of Wilmore’s Model 1747-ATS automatic transfer switch, the inverter can function as the primary or backup ac source for applications requiring uninterruptible/redundant power. Conservatively designed and well-protected against external faults, the Model 1747 dc-to-ac inverter is ideal for powering waveshape-sensitive and frequency-sensitive ac loads from dc power systems.

### FEATURES

- **CONSERVATIVELY RATED 2,200 VA IN TWO RACK SPACES (HEIGHT 3.5”)**
- **ISOLATED, REGULATED LOW-DISTORTION OUTPUT**
- **QUARTZ CLOCK FREQUENCY STABILITY**
- **APPROX. 90% EFFICIENT**
- **EXTERNAL AUTO-TRANSFER SWITCH AVAILABLE FOR UPS / REDUNDANT-POWER APPLICATIONS**

### Table 1

<table>
<thead>
<tr>
<th>Nominal Input Voltage (Vdc)</th>
<th>Input Voltage Range (Vdc)</th>
<th>Input Current No Load (Adc)</th>
<th>Input Current Full Load (Adc)</th>
<th>Efficiency</th>
<th>Heat Dissipation (Btu/hour)</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>21-29</td>
<td>2.3</td>
<td>119</td>
<td>88%</td>
<td>1024</td>
<td>1747-24-115-60</td>
</tr>
<tr>
<td>48</td>
<td>42-56</td>
<td>1.1</td>
<td>58.3</td>
<td>90%</td>
<td>834</td>
<td>1747-48-115-60</td>
</tr>
<tr>
<td>130</td>
<td>105-145</td>
<td>0.4</td>
<td>23.0</td>
<td>91%</td>
<td>743</td>
<td>1747-130-115-60</td>
</tr>
</tbody>
</table>

1 Typical at nominal input voltage
2 Typical at full load and minimum input voltage
The Model 1747-ATS automatic transfer switch enables operation of the Model 1747 inverter in a redundant manner with commercial ac power (or with a second inverter) to provide uninterruptible/backup power. An AC power meter is provided for assessing output power conditions including true-rms AC potential in Volts, true-rms AC current in Amperes, real AC power in Watts, and AC power factor as a fraction.

Front-Panel Controls and Indicators
Combination circuit breaker and ON/OFF switches are provided for both input and output power. An AC power meter is provided for assessing output power conditions including true-rms AC potential in Volts, true-rms AC current in Amperes, real AC power in Watts, and AC power factor as a fraction.

Mechanical Description
Figure 1 provides overall dimensions. Mounting brackets are provided for use with 19-inch or 23-inch equipment racks. A cover plate protects the dc-input rear-panel wiring connections, which are made via high-current compression lugs. Output connections are made via a duplex receptacle, NEMA type 5-20R. Standard front-panel paint color is black. Weight is approximately 22 lbs.

Specifications subject to change without notice

The Model 1747-ATS automatic transfer switch enables operation of the Model 1747 inverter in a redundant manner with commercial ac power (or with a second inverter) to provide uninterruptible/backup power. The unit combines automatic power-failure sensing and high-speed switchover circuitry in a 1U (1.75” high) enclosure with a rear-panel duplex receptacle. The user can choose to operate the inverter as the ac power source that normally powers the load, or as the standby ac power source. For more information, request Bulletin No. 7052.