Less than 1000 VA, Sinewave Static Inverters

Designed to replace rotary motor-generator sets, Power Paragon’s static inverters provide a no-maintenance, solid-state solution to the conversion of DC power from the aircraft bus to the AC power required to operate motors and solid-state loads. The output of these inverters is a low distortion, regulated, EMI filtered sinewave.

The multipurpose solid-state inverter is designed for application in military and commercial fixed and rotary wing aircraft.

The AC output is isolated from the DC input to accommodate any conceivable grounding scheme. These inverters weigh significantly less than their equivalent motor-generator sets and eliminate brush and bearings maintenance requirements.

Efficiency is essentially constant over the entire input range due to a proprietary, high-frequency, pulsar circuit design.

All of the lower power inverters are ambient cooled and several are QPL listed.

Power Paragon manufactures a wide range of static inverters to fit most airborne requirements. Units range from 30 VA to 1000 VA.

For more detailed information on our 1000 VA units, please visit our website at L-3com.com/PowerParagon.

STANDARD FEATURES:
- Selected units are QPL devices
- Low EMI (per MIL-STD-461)
- Output regulated against line/load changes
- Reverse input voltage protection
- Qualified for operation from -55°C to 85°C temp range
- No maintenance required
- Automatic shutdown for input overvoltage protection
- Output surge capability to start motors
- Automatic current limiting and recovery to protect against overloads and short circuits
- Output power conforms to MIL-STD-704

APPLICATIONS:
- Fixed & rotary wing aircraft
- Weapons systems
- Drive motor loads
- Replace motor-generator sets
**STATIC INVERTERS**

Less than 1000 VA, Sinewave Static Inverters

**ELECTRICAL CHARACTERISTICS:**
- **Input Voltage**: 28 VDC nominal actual min. & max. limits vary per model
- **Output Voltage**: 115 VAC, true RMS single and 3-ph units available
- **Frequency**: 400 Hz, ±7 Hz
- **Distortion**: 5% max. THD
- **Power Factor**: 0.75 lagging (inductive) to 0.95 leading (capacitive)
- **Overload**: 200% load current, 5 sec. min. at reduced output voltage

**ENVIRONMENTAL CHARACTERISTICS:**
- **Temperature Range**: -55°C to 85°C
- **Altitude**: Sea level to 65,000 ft per MS33543, Curve 1
- **Cooling**: Self cooled by convection & radiation, except 750 VA unit which is fan cooled

**PHYSICAL CHARACTERISTICS:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Power (VA)</th>
<th>Ph</th>
<th>Dimensions (in)</th>
<th>Weight (lbs)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS285-1</td>
<td>65</td>
<td>1</td>
<td>6.0 x 4.8 x 38</td>
<td>3.0</td>
<td>28 VAC tap</td>
</tr>
<tr>
<td>PS283-3</td>
<td>100</td>
<td>1</td>
<td>5.0 x 7.0 x 5.0</td>
<td>4.9</td>
<td>MS16057-3 qualified</td>
</tr>
<tr>
<td>PS417</td>
<td>400</td>
<td>1</td>
<td>13.2 x 7.0 x 6.8</td>
<td>10.0</td>
<td>MS16057-6 qualified, 60 Hz output, mobile/ground transportation vibration</td>
</tr>
<tr>
<td>PS277-3</td>
<td>750</td>
<td>3</td>
<td>11.5 x 5.5 x 8.02</td>
<td>23.0</td>
<td>MS17406-3 qualified</td>
</tr>
</tbody>
</table>

*for 1000 VA units, visit our website at L-3Com.com/PowerParagon.

For exact specifications, connector types and mounting information, contact your local rep or email us at info.ppi@L-3Com.com

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**Chassis - Common Return**

- 115 VAC Out
- +28 VDC In
- N/C

**Power Paragon**

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