OC2201

DC-DC Converter
Power Supply Module

(Document Rev A03 11/01/2015)

28Vdc Input, Single +12V, 199W Output

Product Highlights

This small package dc-dc power converter module works with a nominal input Vdc range providing a stable regulated output voltage. This COTS solution works well for Industrial and Mil-cots military power supply applications and is designed to meet portions of the FCC Class A EMI requirements. The OC2201 custom supply was developed for powering underwater cameras on unmanned scientific submersible submarines.

AEGIS Power Systems, Inc. specializes in the front end design, development, and manufacture of Rapid Response Custom Switching Power Supplies for Mil-COTS, defense, industrial, telecomm, aircraft, shipboard, rack mount, electric powered vehicle, and other industrial and military power supply applications. Contact Aegis for specific details on a custom power supply that would meet your particular military power supply or power converter.
**SPECIFICATIONS**

(Typical at 25°C, nominal line and 100% load, unless otherwise specified.)

**Input voltage:** +28VDC Nominal, Range 20-31Vdc.

**Input current:** 8.2 A at 28Vdc input.

**Input power:** 230W.

**Output power:** 199W.

**Holdup time:** Contact Aegis.

**Output voltage:** +24Vdc. See table 2 for details.

**Efficiency:** 87% Typical.

**Output ripple:** 250mV Typical, 325mV pk-pk Max. (20MHz BW).

**Current Limit:** Short circuit protected with automatic recovery.

**Start up time:** Contact Aegis.

**Voltage set point:** ± 1% @ nominal Vout.

**Line regulation:** ± 2%.

**Load regulation:** ± 2%.

**Temperature regulation:** ± 0.5%.

**Temperature:** –20°C to +55°C Operating. -40°C to +100°C Non-Operating.

**Cooling:** Convection. Customer provided forced fan cooling.

**Package:** Open Frame.

**Dimensions:** 2.39"H x 2.75"W x 5.3"L.

**Weight:** 1.1 lbs. Typical.

**Connector:** Contact Aegis.

**Vibration:** Contact Aegis.

**Shock:** Contact Aegis.

**Humidity:** 0-95% non condensing.

**EMI:** Designed to meet FCC Class A EMI requirements.

**Other Features:** Remote/Local Output Sense, Optional Power Ok.

Specifications subject to change without notice.

**Table 2: Voltage Outputs**
<table>
<thead>
<tr>
<th>OC2201</th>
<th>V1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>+24Vdc</td>
</tr>
<tr>
<td>Current</td>
<td>8.3A</td>
</tr>
<tr>
<td>Power</td>
<td>199W</td>
</tr>
<tr>
<td>Ripple*</td>
<td>250mV</td>
</tr>
</tbody>
</table>

*Typical

*Maximum ripple 325mV.
NOTES:
1. 4ea .141 THRU HOLE
2. 2ea 10-32 STUDS, (PEM KFH-032 or EQ)
3. 2ea TERMINAL BLOCK CONN (ALTECH MV-253 or EQ)
   CONNECTOR WILL ACCEPT 30 - 14 AWG WIRE
   MAX TORQUE 0.5Nm, 4.5 lbf-in.
4. UNIT FINISHED WEIGHT APPROX. 1.02 LBS
5. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M-1994

See Note 1.

See Note 2.

See Note 3.