

OC2201

DC-DC Converter Power Supply Module

(Document Rev A03 11/01/2015)



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

Market: Industrial

Application: Unmanned Submarine Underwater Camera

Features

- 28Vdc Input
- Single Output, 199W
- MIL-STD-461E EMI *
- Open Frame Power Module

* Designed to meet portions of this particular standard. Contact AEGIS Power Systems for specific details.

Table 1: Maximum Ratings

Parameter	Rating	Unit	Notes
Vin max range	20 to 31	Vdc	
Temperature	-20 to +55	°C	
Output Power	199	W	
Input power	230	W	
+24Vdc output	199	W	Refer Table 2 (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.

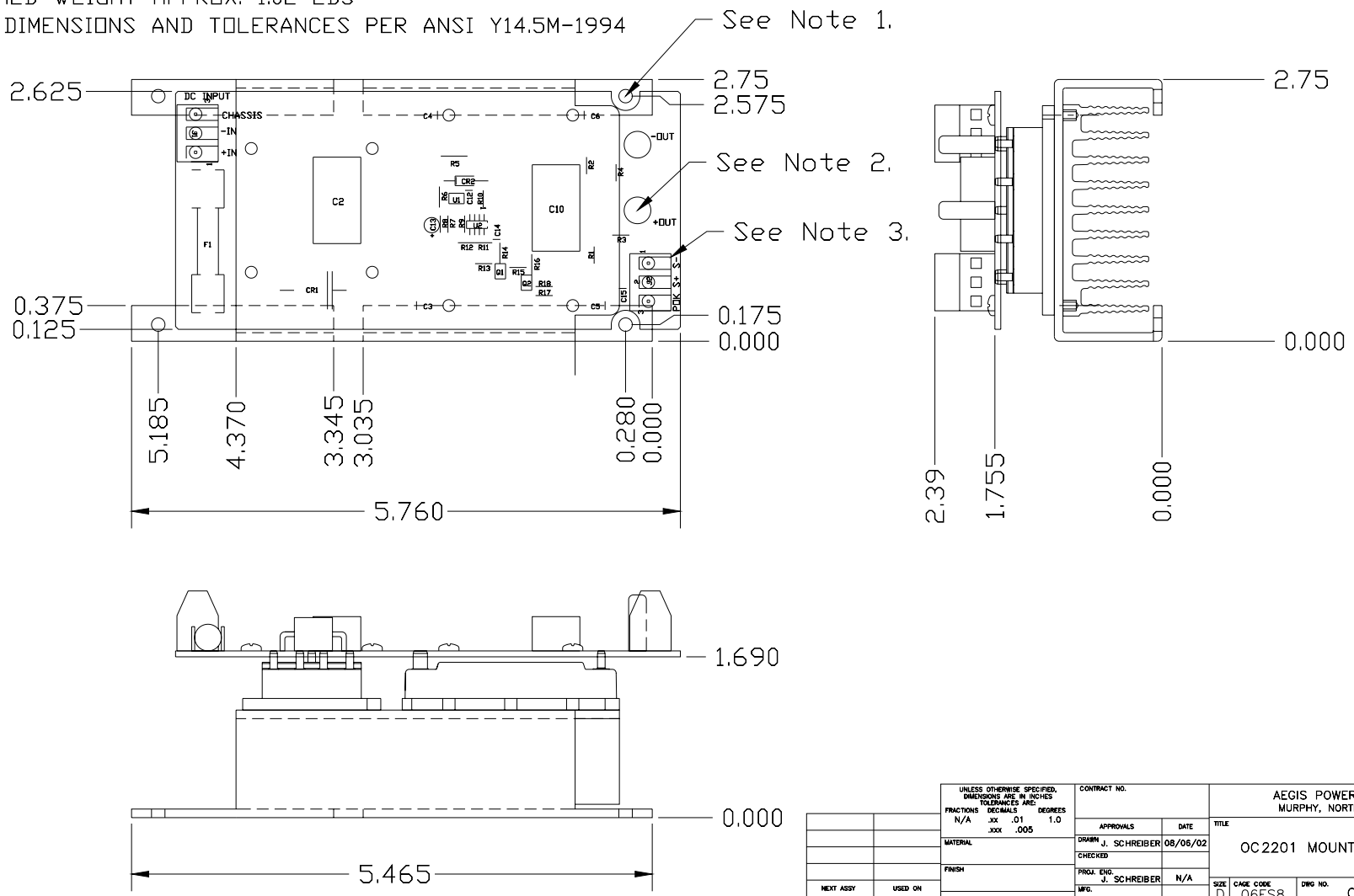
Table 2: Voltage Outputs

OC2201	V1			
Voltage	+24Vdc			
Current	8.3A			
Power	199W			
Ripple*	250mV	Typical		
*Maximum ripple 325mV.				

DWG NO.		SH	REV	1
REV	DESCRIPTION	DATE	APPROVED	
A02	ADDED TWO NEW MTC TABS WITH V-GROOVE	10/07/03	JFS	

NOTES:

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



UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. FRACTIONS DECIMALS DEGREES N/A .001 .01 1.0 .004 .005		CONTRACT NO.	AEGIS POWER SYSTEMS MURPHY, NORTH CAROLINA	
MATERIAL	APPROVALS	DATE	TITLE	
FINISH	DRAWN	08/06/02	OC2201 MOUNTING INFO	
NEXT ASSY	CHECKED		SIZE	CAGE CODE
USED ON	PROJ. ENG.	N/A	D	06ES8
APPLICATION	MFG.		DWG NO.	OC2201-M00
	QUALITY		SCALE	1/1
			REV	A02
			SHEET 1 OF 1	