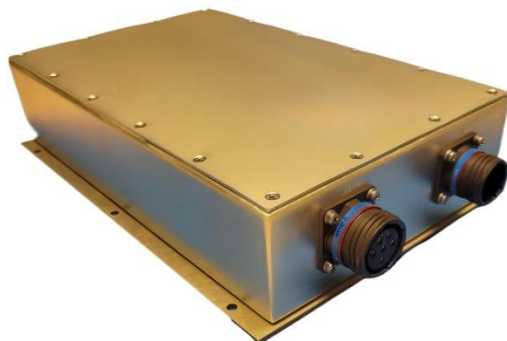


CH-A500 Series

Aviation Grade AC/DC Power Supply



FEATURES

- Efficiency : > 85% typical @full load
- 500W Output Power
- Conduction cooled
- Optional secondary voltages
- 47~63Hz; 400~800 Hz input Frequency
- Mil-Grade D38999 Connectors
- 80 msec holdup time

INPUT			
Voltage/ Freq	Vrms	AC 85~264/ 47~63Hz, 400~800 Hz	
Current	A(rms)	6A (typical at maximum output power)	
Inrush Current	A	15 Amp peak	
Power Factor	-	> .98 @ 115vac 400Hz; > .99@230vac @ full load	
Leakage Current	mArms	< 3.3 mArms @ 115 VAC in, 400 Hz	

		Unit	CH-A500-12	CH-A500-24	CH-A500-28	CH-A500-48
OUTPUT	Voltage (Primary)	VDC	12	24	28	48
	Efficiency (Full Load, Typ)	%	85.5	85.5	85.5	85.5
	Current	A	41.67	12.5	10.78	10.42
	Max Power (Primary Output)	W	500	500	500	500
	Regulation	%	+/-1.5	+/-1.5	+/-1.5	+/-1.5
	Ripple/Noise	% Pk-Pk	1.00	1.00	1.00	1.00
	Hold-up Time	mS	>200mS @ full load, 115 VAC			
	Insulation And Dielectric *	Primary-Secondary	4242 VDC (3000 VAC) Reinforce Grade Insulation			
Primary to Ground (Mounting holes or chassis)		2152 VDC (1500 VAC) Basic Grade Insulation				

Note: Full performance data information available upon request.



Protection	Overvoltage	Shutdown and latch off; AC recycle to restart
	Overload	Constant current for 1 second, Auto recovery
	Over temperature	Output shutoff until base plate temp reaches 85C, Thermal cutoff is 90~105C (measured at baseplate)
	Short Circuit	Auto Recovery
Environment	Operating Temp	-45~85C
	Storage Temp	-55 to +100 C
	Operating Humidity	10~95% , non-condensing
	MTBF MIL HDBK-217F Ground MIL HDBK-217F Airborne	>840,000 hrs. @ 70C ambient temp. >105,000 hrs # 70C ambient temp
Standards *See note 2	Input Voltage	Airbus ABD0100.1.8, RTCA/DO-160G
	Switching Transients	Airbus ABD0100.1.8, RTCA/DO-160G, EN61000-4-4, EN61000-4-5
	Voltage Spikes	Airbus ABD0100.1.8, RTCA/DO-160G, EN61000-4-6
	Frequency Transients	Airbus ABD0100.1.8, RTCA/DO-160G
	Harmonic Content	Airbus ABD0100.1.8, RTCA/DO-160G, EN61000-3-2, MIL-STD-1399
	DC Content on Input Voltage	Airbus ABD0100.1.8, RTCA/DO-160G
	Audio Frequency Conducted Susceptibility	RTCA/DO-160G
	Audio Frequency Conducted Emissions	RTCA/DO-160G
	Induced Signal Susceptibility	RTCA/DO-160G, EN61000-4-6
	Conductive Emissions	RTCA/DO-160G, EN55011/22
	Magnetic Effect	RTCA/DO-160G, EN61000-4-11
	Radiated Emissions	RTCA/DO-160G, EN61000-4-3
	Electrostatic Discharge	RTCA/DO-160G, EN61000-4-2
	Electrical Bonding and Grounding	D6-44588, UL 60950-1
Lightning Requirements	D6-16050-5, RTCA/DO-160G	
Size	Inches/lbs	8" x 5" x 2.60" / 3.5 lbs (with single output and Dsub connectors)

1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.

2. Unit uses aviation grade components for pressurized cabin use and is designed to meet standards listed.





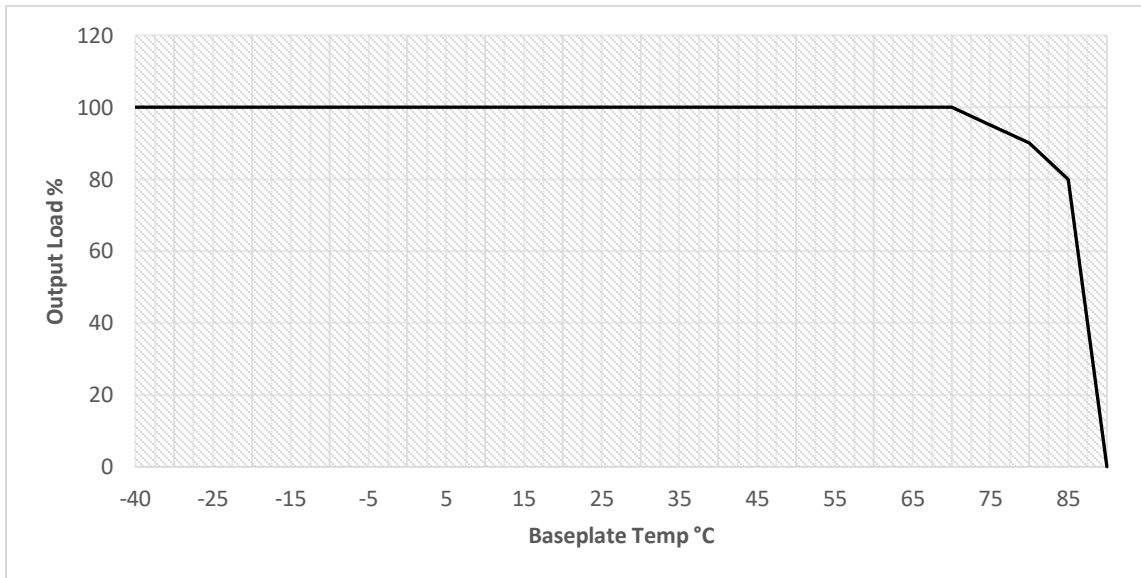
OPTIONS

Secondary Voltages					
Note: only one secondary output voltage available in package. Secondary voltage is floating and isolated from primary voltage. Additional voltages available with NRE.					
2nd Voltage	VDC	5		12	
2nd Current	A	2	5	2.4	2.08
Designation	Suffix	-105	-205	-112	-212

Connectors
Customer may request connector change with MOQ, D38999 or equivalent MIL/SAE 5015 or equivalent

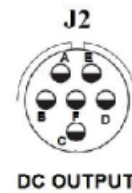
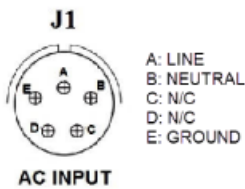
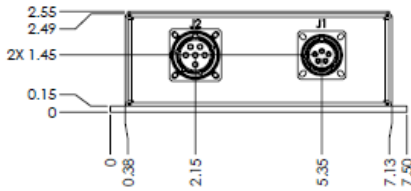
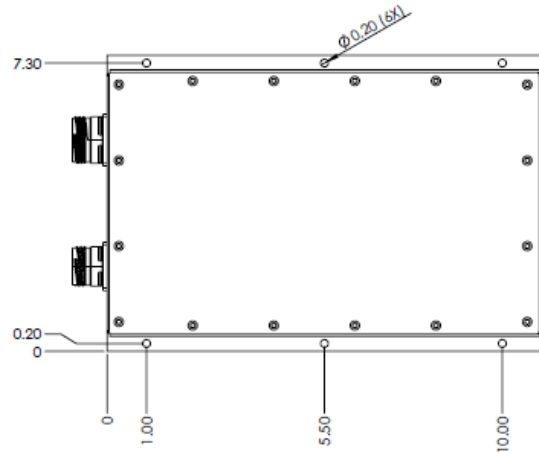
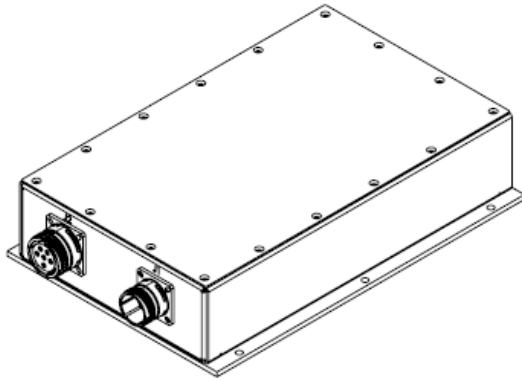
MIL-STD-198 (section 200), and MIL-HDBK-5400 compliance
Contact ETA-USA for MIL-STD-198 (section 200), and MIL-HDBK-5400 compliant version of the product (no electrolytic capacitors)

DERATING CURVE





DIMENSIONAL DRAWING



J1:
J1-A: Line
J1-B: Neutral
J1-E: Ground
J1-C,D: N/C

J2:
J2-A: +Vout
J2-B: +Vout
J2-C: +Vout
J2-D:RTN
J2-D:RTN
J2-F: RTN

**Specifications Subject to Change Without Notice*

