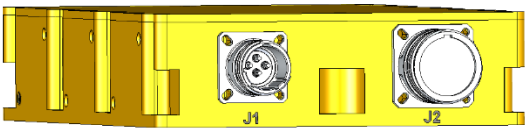
LPM500 Series

Conduction Cooled AC/DC Power Supply



FEATURES

- Conduction cooled
- 85~245 VAC input; 50/60-400 Hz
- D38999 connectors
- Conformal Coated
- 20 msec holdup time
- Aluminum Enclosure-Conductive Chromate treated
- Mil-Std 461, 704, 810, 901 D, 1399 Compliant

INPUT	Voltage/ Freq	Vrms	AC 85~264/ 47~440Hz,
	Current	A(rms)	6A (typical at maximum output power, 115VAC in)
	Inrush Current	A	25 A max at cold start
	Power Factor	-	> .99 @ 115vac; > .97@230vac @ full load (Meets Mil-Std 1399 Sec 300)
	Leakage Current	mArms	< 3.3 mArms @ 115 VAC in
	No Load Consumtion	mArms	450 mA max @ 115Vac in

		Unit	CH-M500-12	CH-M500-24	CH-M500-28	CH-M500-48
OUTPUT	Voltage	VDC	12	24	28	48
	Efficiency 110 VAC 220 VAC	%	 84 85	 88 89	 88 89	 88 90
	Current	A	41.7	20.5	18	10.42
	Max Power	W	500	500	500	500
	Regulation	%	+/-1.5	+/-1.00	+/-1.00	+/-1.00
	Ripple/Noise (Max)	% Pk-Pk	1.00	1.00	1.00	1.00
	Hold-up Time	mS	>20mS @ full load, 115 VAC			
	Insulation And Dielectric	Primary-Secondary	4242 VDC (3000 VAC)			
		Primary to Ground (Mounting holes or chassis)	>1500 VDC for 30 seconds			
		Output to Ground	>100MΩ at 25°C, 40%RH & 500VDC			

Note: Full performance data information available upon request.

Protection	Overvoltage	Shutdown and latch off; AC recycle to restart
	Overload	Hiccup, Auto recovery
	Over temperature	Output shutoff until base plate temp reaches over 75°C,
	Short Circuit	Auto Recovery
Environment	Operating Temp	-40~80°C Ambient (Maximum Base plate 75°C)
	Storage Temp	-55 to +100 °C
	Operating Humidity	10~95% , non-condensing
	Operating Altitude	15,000 ft max
	Vibration	MIL-STD 810H, Method 514.8, Category 24, Figure 514.8E-1.
	Shock	MIL-STD-810H, Procedure 1, 20G 11ms MIL-S 901D
	MTBF Telecordia SR-22	 >158,000 hrs.@ 40C ambient temp.
Standards	Conducted Emissions[2] Susceptibility Radiated Emissions Immunity[3] Transient	MIL-STD-461F/G: CE 101, CE 102 (10Khz~10Mhz) MIL-STD-461F/G: CS114, CS115 MIL-STD-461F/G: RE102, 8 kV (contact discharge) or 15 kV (air discharge) electrostatic discharge MIL-STD 704
Size	Inches/lbs	9.15” (10.07 w/ conn) x 6.15" x 1.8” / 4.9 lbs

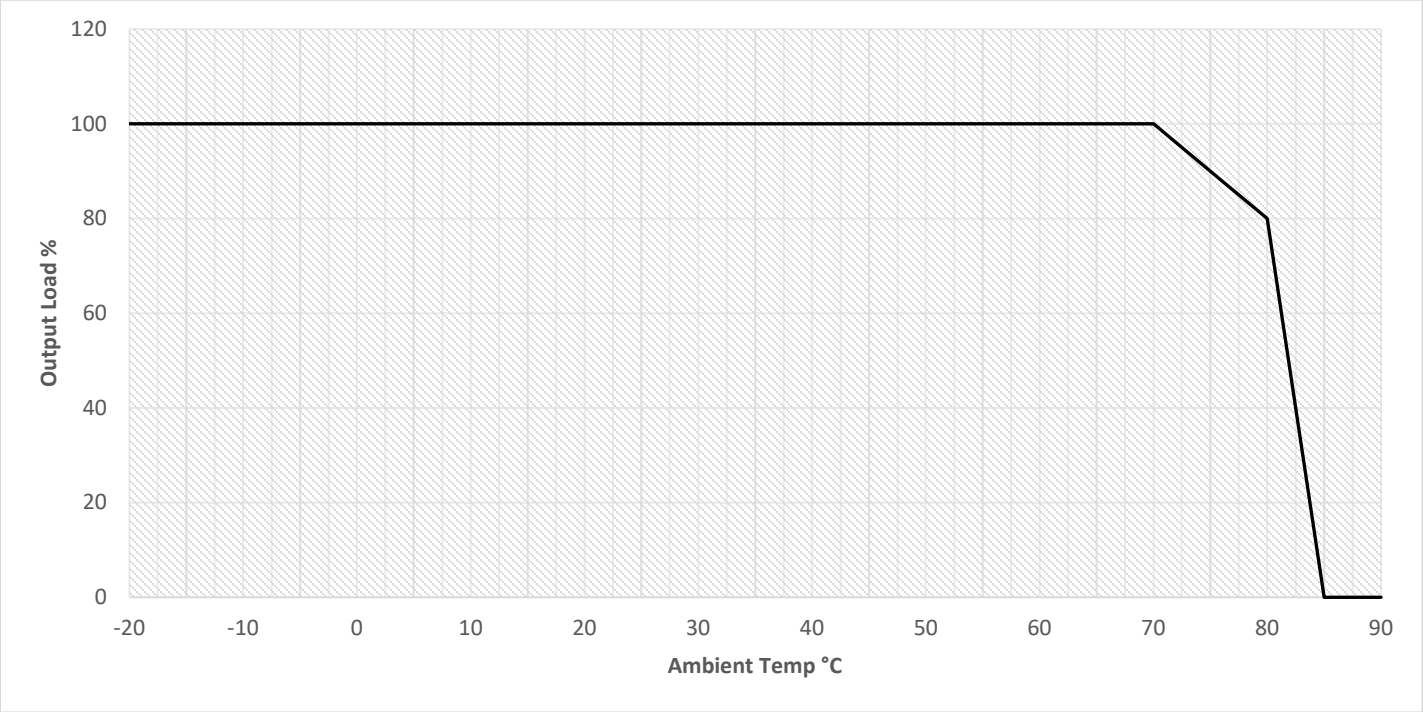
1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
2. Standards: Unit has been designed to meet the standards listed. It is the responsibility of vendor to test in system. Conducted emissions (CE101, C102) using shielded 3 conductor cable (L,N,G) with unit mounted to chassis ground.
3. Contact factory for test conditions.

OPTIONS

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

Additional Options
Non-Standard Voltages Anodized Enclosure Powder coat painted

DERATING

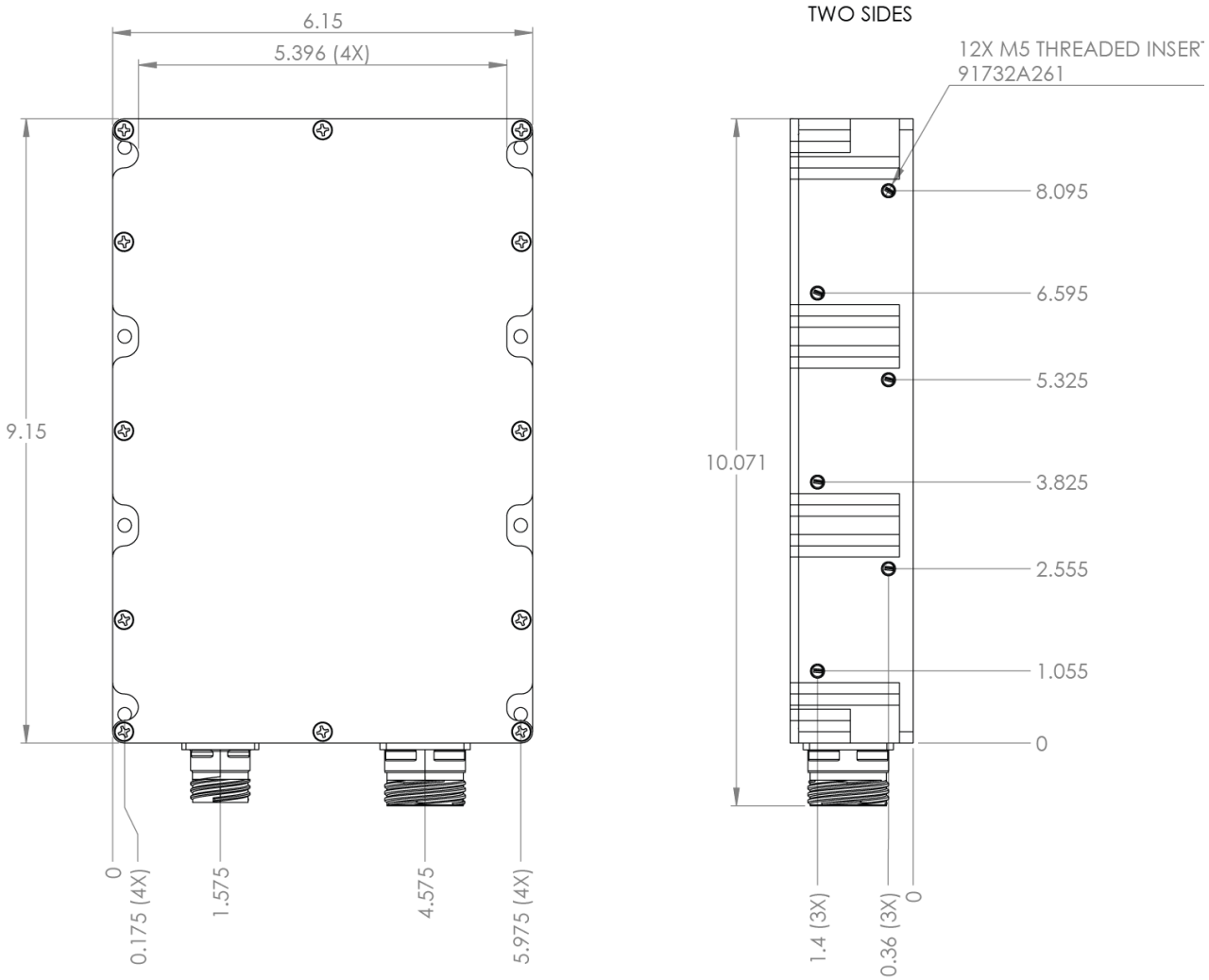


LPM500-vv-(F#)-(++)

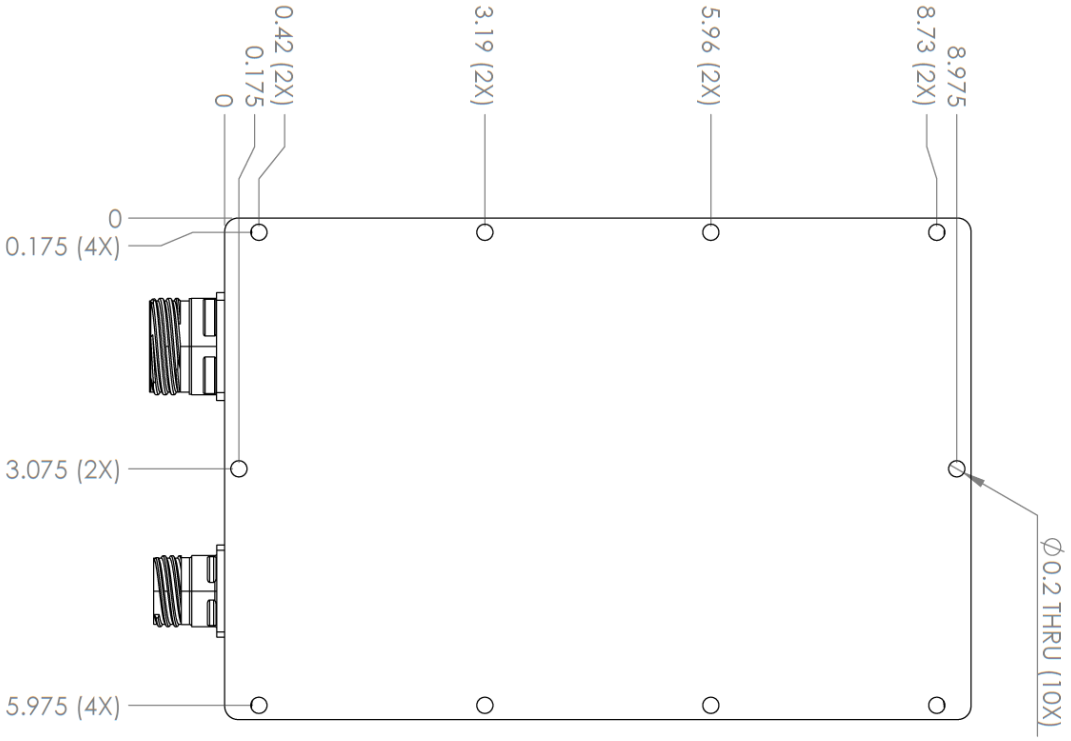
DESIGNATION	FUNCTION	OPTION DESCRIPTION
vv	Output Voltage	12, 24, 28, 48,
F#	Chassis Finish	Chromate: Gold=BLANK Clear =F1 Anodize: Gold =F10 Clear =F11 Black=F12 Blue=F13
		*Powder Coat Paint: Light Gray=F20 Sand= F21 NATO Green=F22
++	Additional Customization	Connector changes or custom pinouts, additional requests shall have additional suffix assigned, inquire with an ETA representative.

** Powder coat paint: Unit shall be* subjected to a *clear chromate coat and painted on all sides except base. Colors not listened may be available by special request if customer submits RAL, Pantone, or Hex Number.*

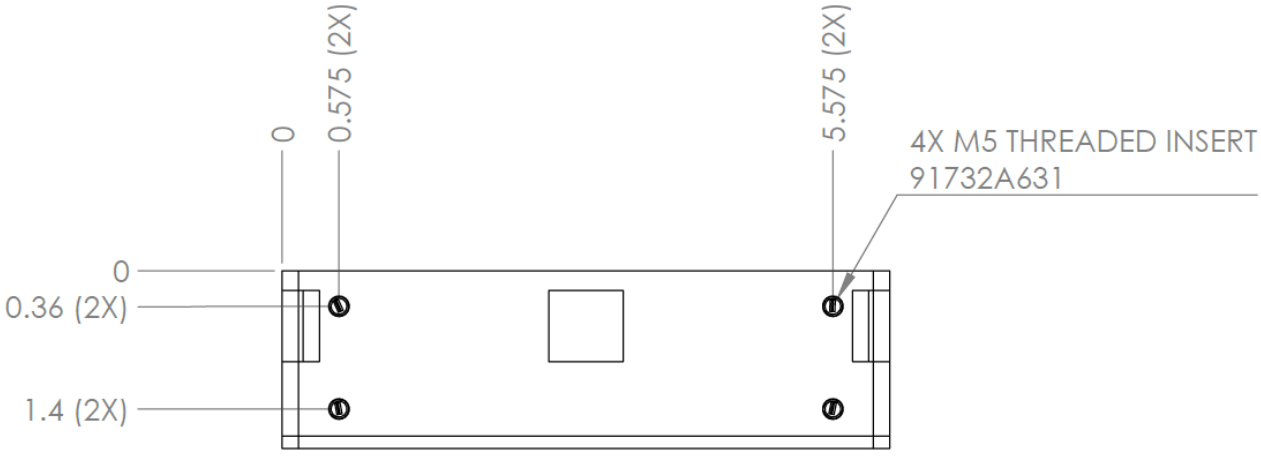
DIMENSIONAL DRAWING



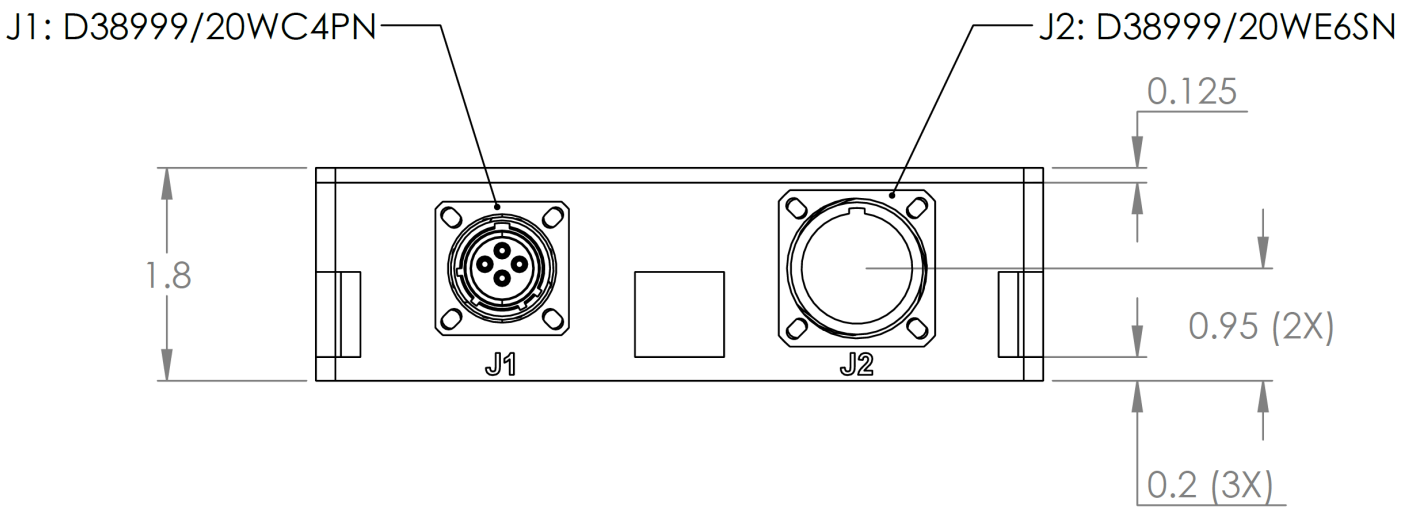
BOTTOM


0
0.175
0.42 (2X)
3.19 (2X)
5.96 (2X)
8.73 (2X)
8.975
0
0.175 (4X)
3.075 (2X)
5.975 (4X)
Ø0.2 THRU (10X)

REAR

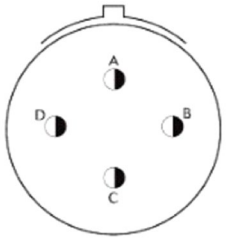

0
0.575 (2X)
5.575 (2X)
4X M5 THREADED INSERT
91732A631
0
0.36 (2X)
1.4 (2X)

FRONT

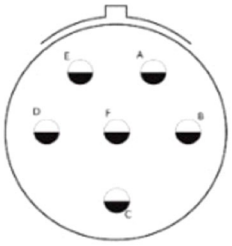


Pinout (Standard)

J1: D38999/20WC04PN



J2: D38999/20WE6SN



Standard Connector

J1: D38999/20WC04PN
J1-A: Line
J1-B: Neutral
J1-C: Ground
J1-D: N/C

J2: D38999/20WE6SN
J2-A: +Vout
J2-B: +Vout
J2-C: +Vout
J2-D: Vout RTN
J2-E: Vout RTN
J2-F: Vout RTN

Specification subject to change without notification