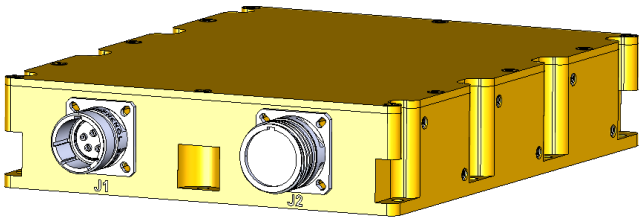
LPM 1100 Series — Conduction Cooled AC/DC Power Supply



FEATURES

- Conduction cooled
- 1100 Watt
- 85~264 VAC input; 50/60/400Hz
- D38999 connectors
- Conformal Coated
- >20 msec holdup time
- Aluminum Enclosure-Conductive Chromate treated
- Mil-Std 461, 704, 810, 1275, 1399 Compliant

INPUT	Voltage/ Freq	Vrms	AC 85~264/ 47~440Hz
	Current	A(rms)	12A (typical at maximum output power, 115VAC in)
	Inrush Current	A	35 A max (peak) at cold start
	Power Factor	-	> 0.99 @ full load (115VAC & 220 VAC) Meets Mil-Std 1399 Sec 300 @ 10% load @115 VACin 20% load and higher for 220VACin
	Leakage Current	mArms	< 850 µArms @ 115 VAC in

			LPM1100-12	LPM1100-24	LPM1100-28	LPM1100-48	LPM1100-55
OUTPUT	Voltage	VDC	12	24	28	48	55
	Efficiency 110 VAC 220 VAC	%	85 87	88 89	89 90	90 91	90 91
	Current	A	83.4	45.83	39.26	22.92	20
	Max Power	W	1001	1100	1100	1100	1100
	Regulation	%	+/-1.5	+/-1.00	+/-1.00	+/-1.00	+/-1.00
	Ripple/Noise	% Pk-Pk	1.00	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	Constant Current to Hiccup, Auto recovery
	Over temperature	Output shutoff until base plate temp reaches over 75°C,
	Short Circuit	Auto Recovery
Environment	Operating Temp	-40~+75C Ambient (70°C Baseplate)
	Storage Temp	-55 to +105 C
	Operating Humidity	10~95% , non-condensing
	Operating Altitude	15,000 ft max (30,000 ft in pressurized cabin)
	Vibration	MIL-STD810H, Method 514.8, Category 24, Figure 514.8E-1.
	Shock	MIL-STD-810H, Procedure 1, 20G 11ms MIL-S-901 D
	MTBF Telecordia SR-22	>205,000 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 with connector) x 7.15" x 1.18” / 7.5 lbs

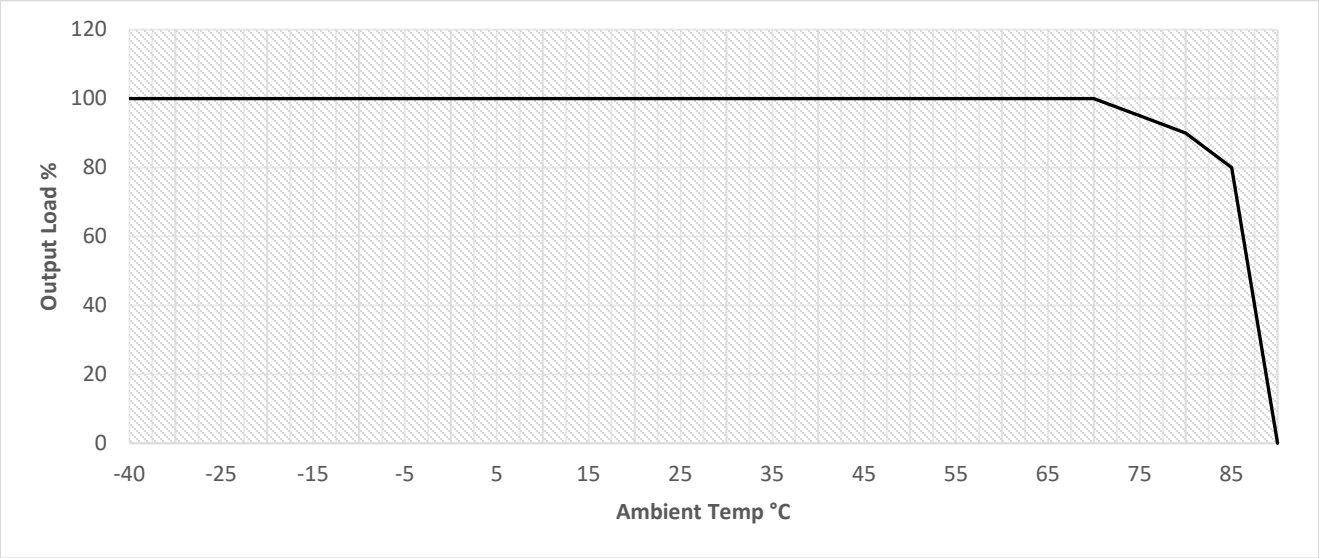
1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
2. Standards: Unit has been designed to meet the standards listed. It is the responsibility of the customer to test in system. Conducted emissions (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 (Factory Set 9~55VDC) Anodized or Power Coat Enclosure Remote On/Off l Status Reporting (I2C-Vout, Iout, Internal Temp)

DERATING



HOW TO ORDER

LPM1100-vv-(F#)-(R)-(I#)-(++)

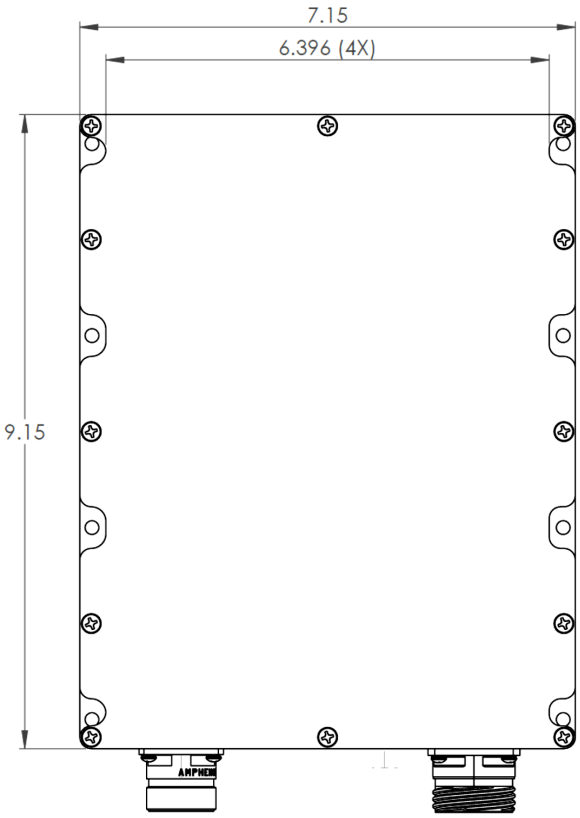
DESIGNATION	FUNCTION	OPTION DESCRIPTION
vv	Output Voltage	12, 24, 28, 48, 55 are standard; non standard available upon request
F#	Chassis Finish	Chromate: Gold=BLANK Clear =F1 Anodize: Gold =F10 Clear =F11 Black=F12 Blue=F13
		*Powder Coat Paint: Light Gray=F20 Sand= F21 NATO Green=F22
R	Remote On/Off	Remote on/off wiring available on J3, D-sub connector
I	I2C Reporting	Reporting data on Vout, Iout, internal temo and humidity 3.3V bus= I3 5V Bus=I5 **Two Address Selection options available* Pin 5 & Pin 6 Open= 17h, Short =Hex 16h
++	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.*

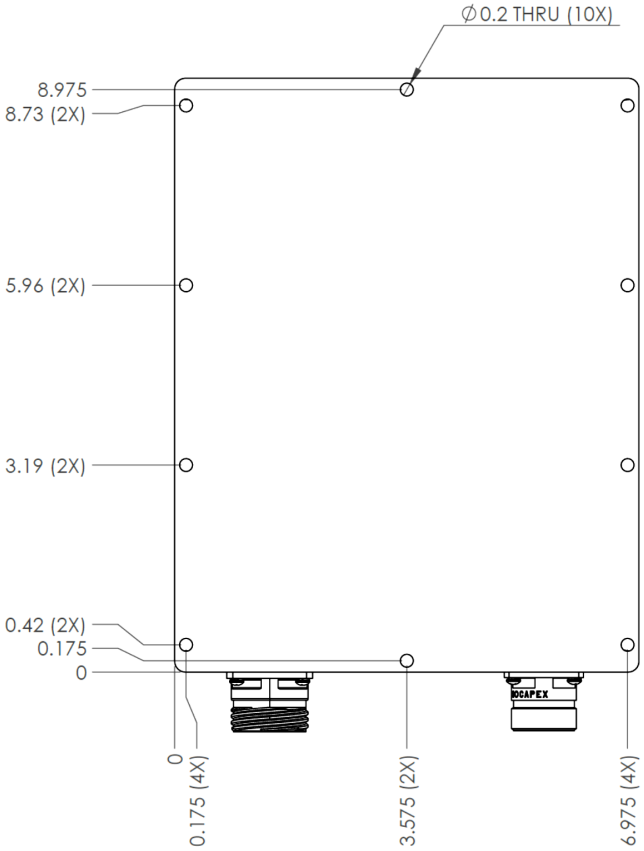
***Additional options for I2C address at short may be substituted to 14h or 15h upon request*

DIMENSIONAL DRAWING

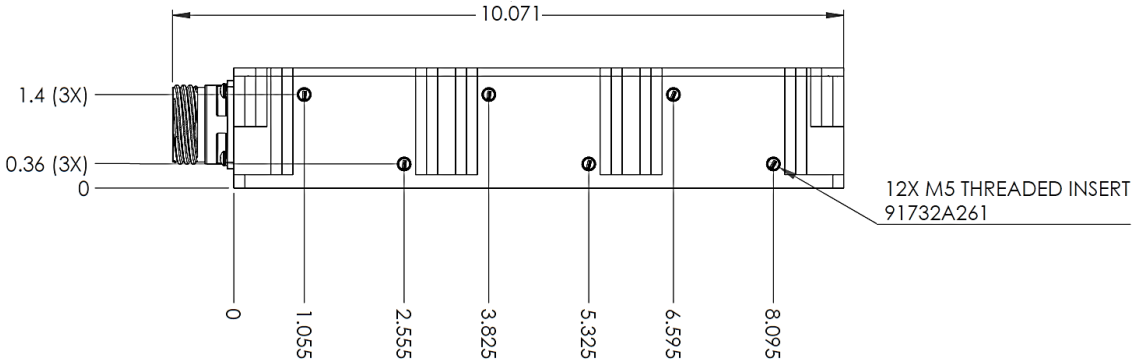
Top



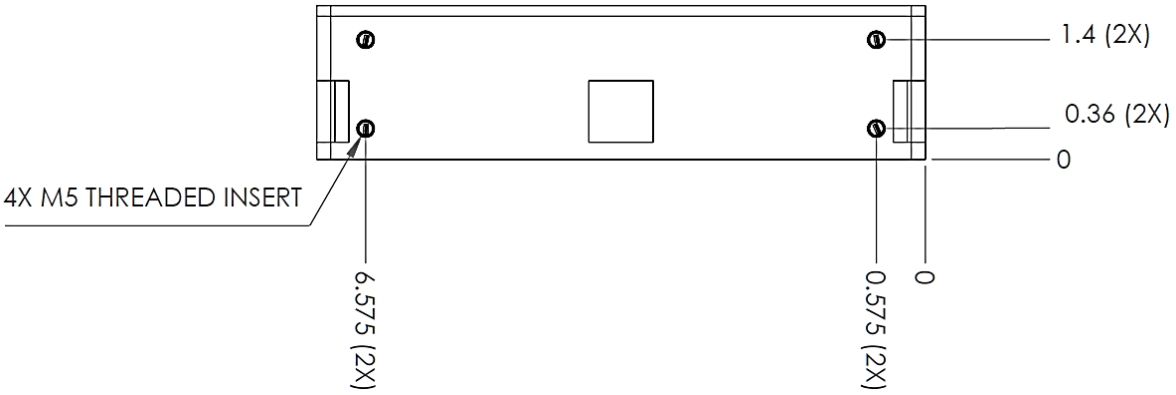
Bottom



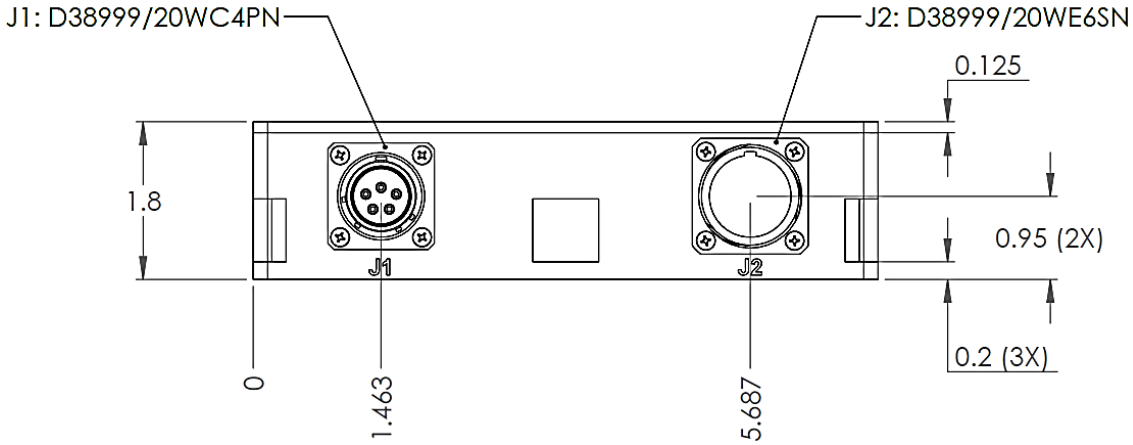
Side



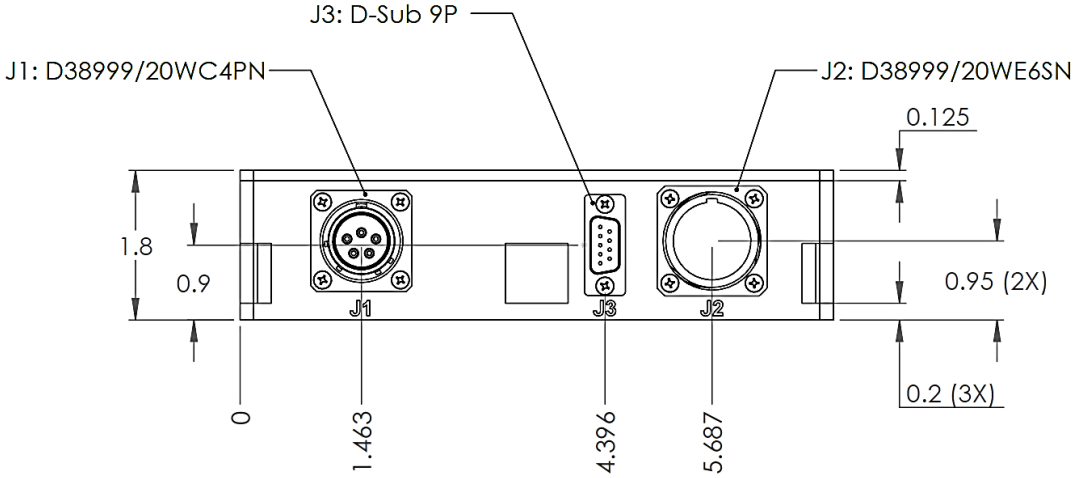
Rear



Front (Standard Model)

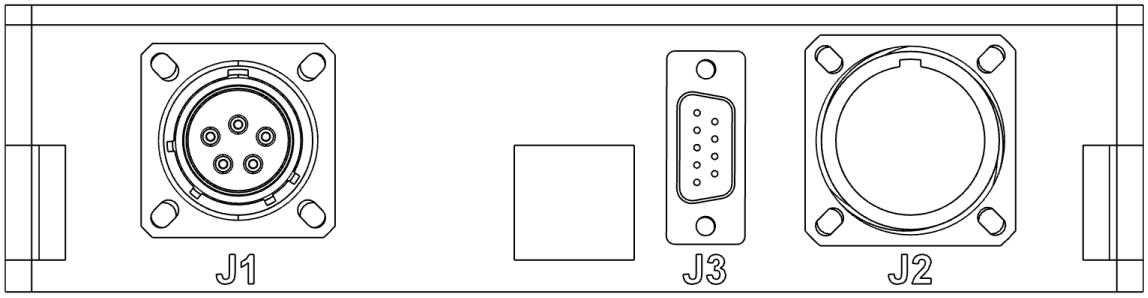


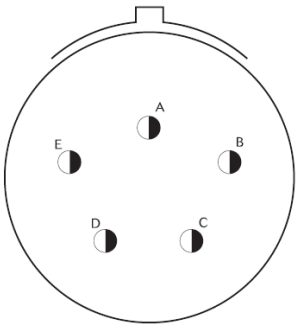
Front (-R & -I# Models)

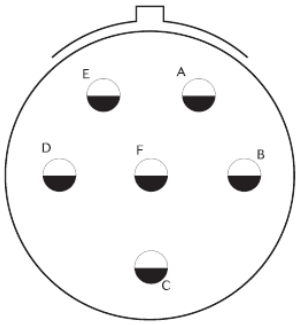


** Dimensions shown in inches*

DIMENSIONAL DRAWING-INTERFACE CONNECTORS





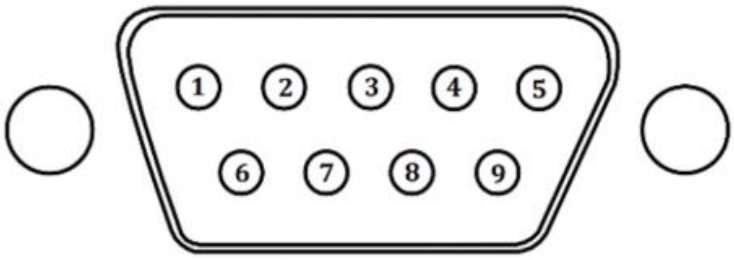


J1: D38999/20WC04PN
J1-A: Line
J1-B: Neutral
J1-C: N/C
J1-D: N/C
J1-E: Ground

***J1& J2 Shell are tied to AC GND

J2: D38999/20WE6SN (24~48Vout)
J2-A: +Vout
J2-B: +Vout
J2-C: +Vout
J2-D: Vout RTN
J2-E: Vout RTN
J2-F: Vout RTN

J3: 9 Position D-Subminiature



Pos#	Function
1	I2C GND
2	SERIAL DATA
3	SERIAL CLK
4	I2C ADD 1
5	I2C ADD 1
6	RC AUX
7	RC
8	RCG
9	RCS