

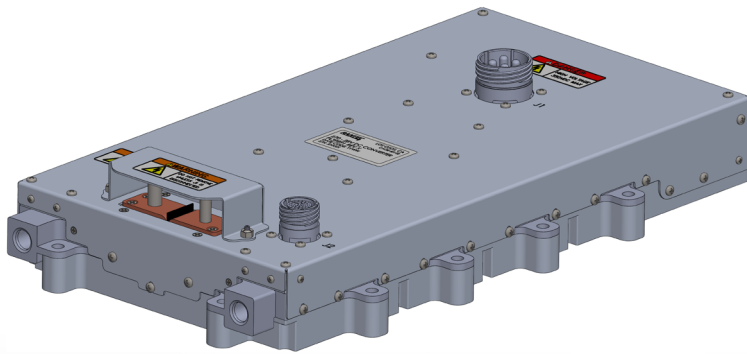
High-Performance Power Conversion

270V -> 28V

Defense Power Converter PL40328

Consult Rantec for your specific
configuration requirements

This rugged 7.5 kW power converter delivers reliable, low-noise 28 VDC power for next-generation military and aerospace systems. Designed to operate from 270 VDC aircraft power, it combines high efficiency, compact size, and proven compliance with MIL-STD-704F and MIL-STD-461G. With dual auxiliary outputs, integrated health monitoring, and full protection features, it ensures resilient performance in harsh environments and mission-critical applications.



- Input: 270VDC per MIL-STD-704F
- 28V Main output at 7.5kW, Dual AUX Outputs at 28V 5A (peak) 0.5A (continuous)
- Output Ripple & Noise per MIL-STD-704F (Main Output)
- Weight: <11 lbs. (dry)
- Operating Temperature: -40°C to +50°C Coolant
- Non-operating temp: -40°C to +125°C
- Efficiency: up to 92.5%
- MTBF: >20,000 hrs @ 40°C AUF
- EMI per MIL-STD-461G: CE102, CS101, CS114, CS115, CS116, CS118, RE102, RS103
- Signals: Disable/Reset, Converter Good, Fault Discretes, Analog Input Voltage & Current Sense
- Communication per MIL-STD-1553B
- BIT (start-up and continuous)
- Protection: Input Reverse Polarity, Output Over-voltage, Output Over-current, Over-temperature, Short Circuit, Inrush Current Limiting



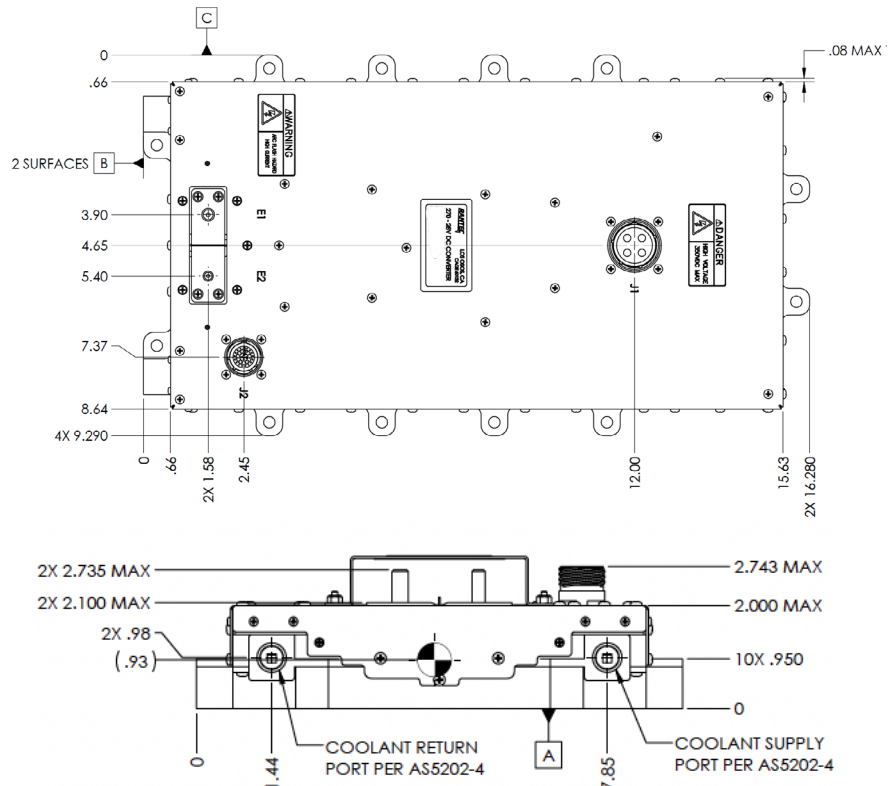
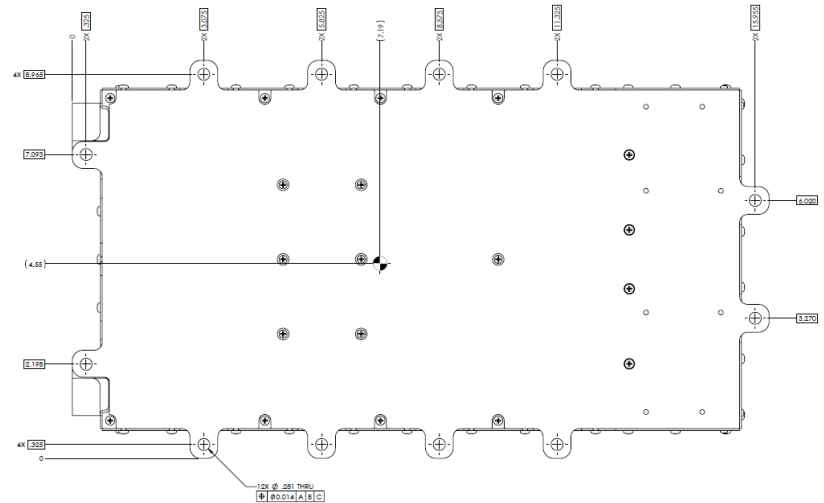
RANTEC

EXCELLENCE BY DESIGN

High-Performance Power Conversion

ELECTRICAL INPUT		
Nominal Voltage	270 VDC	
Steady State Voltage Range	240 VDC - 350 VDC	
Input Transients	Up to 420V	
Efficiency	92.5% at full load	
ELECTRICAL OUTPUT		
Output	28V Main	268A
	28V AUX	0.5A / 5A
	Max steady-state output power: 7528W	
Turn-on Time	<500 ms	
Regulation (incl. ripple)	+/-2% line/load	
Noise and Ripple	Per MIL-STD-704F	
EMI	MIL-STD-461G: CE102, CS101, CS114, CS115, CS116, CS118, RE102, RS103	
Input to Output/ Chassis Isolation	> 1MOhm / 500 VDC	
MECHANICAL		
Weight	11 lbs max	
Format	See Drawing	
Connectors	38999 Input & Signal connectors, studs for outputs	
ENVIRONMENTAL		
Operating Temperature	-40°C to +50°C Coolant	
Cooling	Liquid Cooled	
Altitude	65,000 ft	
Humidity	MIL-STD-810H, Method 507.6, Proc II	
Vibration	MIL-STD-810H, Method 514.8, Proc I, 12.1 grms, 15-2000Hz	
Shock	MIL-STD-810H, Method 516.8, Proc I, 20G, 11ms Terminal Sawtooth	
Sand and Dust	MIL-STD-810H, Method 510.7, Procedure I	
MTBF	>20,000 hrs 40°C Airborne Uninhabited Fighter	

OUTLINE & MOUNTING



Contact us for a technical consultation!

Specifications subject to change without notice. © 2026 Rantec Power Systems Inc. All rights reserved. 270V -> 28V. PL40328

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