

XPm2000

MIL-STD-704 28V Input to $\pm 12V$, 5V, and 3.3V Output 3U Power Supply with Integrated MIL-STD-461E Filtering

- ▶ MIL-STD-704 28V-DC input voltage
- ▶ MIL-STD-461E EMI filtering
- ▶ PICMG 2.11 standard 47 position connector (modified pinout)
- ▶ Up to 200 W output on 3.3V, 5V, and $\pm 12V$ (at 28V-DC input)
- ▶ On-card hold-up capacitor for up to 110 ms (at 120 W) of hold-up time (Optional)
- ▶ Supports additional external hold-up capacitance
- ▶ Up to 90% efficient
- ▶ $-40^{\circ}C$ to $85^{\circ}C$ conduction cooled operating temperature (at the thermal interface)
- ▶ Load sharing support with another XPm2000



XPm2000

The XPm2000 changes the rules on what can be done with a 3U power supply. The XPm2000 takes in a MIL-STD-704 28V-DC input voltage and provides up to 200 W on 3.3V, 5V, and $\pm 12V$ at up to 90% efficiency. The XPm2000 also provides on card MIL-STD-461E EMI filtering.

An innovative hold-up design drastically reduces the size of the hold-up capacitance and allows the capacitor to be retained on-card while maintaining up to 110 ms of hold-up time. The XPm2000 also supports the use of external hold-up capacitors for providing additional hold-up time.

The XPm2000 fits in a 3U cPCI or VPX 1.0-in pitch slot. Up to 8.3 A on 12V, 2 A on -12V, 20 A on 5V, and 25 A on 3.3V can be supported on each rail, separately. The XPm2000 can provide up to a combined 200 W of total output power at maximum operating temperature. The XPm2000 can also be paired up with another XPm2000 for load sharing.

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Input Power

- MIL-STD-704 28V-DC
- MIL-STD-461E EMI filtering

Output Power

- Up to 90% efficient
- Supports up to 200 W in total combined power output
- 3.3V at up to 25 A
- 5V at up to 20 A
- 12V at up to 8.3 A
- -12V at up to 2 A
- Can be paired with another XPm2000 for load sharing

Hold-up

- On-card hold-up capacitor for up to 110 ms (at 120 W) of hold-up time (optional)
- Supports external hold-up capacitor connection

Physical Characteristics

Contact factory for CAD model if desired

- 3U form factor
- PICMG 2.11 standard 47 position connector (modified pinout)
- 1.0-in. pitch (without on-card hold-up capacitor)
- 1.45 lbs. (with on-card hold-up capacitor)
- 1.1 lbs. (without on-card hold-up capacitor)

Environmental Requirements

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 5
- Conformal coating available as an ordering option

Supported Ruggedization Level

Level 5

Cooling Method	Conduction-Cooled
Operating Temperature	-40 to +85 °C (board rail surface)
Storage Temperature	-55 to +105 °C ambient
Vibration	0.1 g ² /Hz (maximum), 5 to 2000 Hz
Shock	40 g, 11 ms sawtooth
Humidity	0% to 95% non-condensing

