

XPm2000

End of Life

MIL-STD-704 28 V Input to ± 12 V, 5 V, and 3.3 V Output 3U Power Supply with Integrated MIL-STD-461E Filtering **Please see XPm2010**

- ▶ MIL-STD-704 28 VDC input voltage
- ▶ MIL-STD-461E EMI filtering
- ▶ PICMG 2.11 standard 47-position connector (modified pinout)
- ▶ Up to 200 W output on 3.3 V, 5 V, and ± 12 V (at 28 VDC input)
- ▶ On-card holdup capacitor for up to 110 ms (at 120 W) of holdup time (optional)
- ▶ Supports additional external holdup capacitance
- ▶ Up to 90% efficient
- ▶ -40°C to 85°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 28 VDC input voltage and provides up to 200 W on 3.3 V, 5 V, and ± 12 V at up to 90% efficiency. The XPm2000 also provides on-card MIL-STD-461E EMI filtering.

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

The XPm2000 fits in a 3U VPX slot. Up to 8.3 A on 12 V, 2 A on -12 V, 20 A on 5 V, and 25 A on 3.3 V 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 28 VDC
- MIL-STD-461E EMI filtering

Output Power

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

Holdup

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

Physical Characteristics

Contact factory for CAD model if desired

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

Ruggedization Level	Level 1	Level 3	Level 5
Cooling Method	Standard Air-Cooled	Rugged Air-Cooled	Conduction-Cooled
Operating Temperature	0 to +55°C ambient †	-40 to +70°C ambient †	-40 to +85°C (board rail surface)
Storage Temperature	-40 to +85°C ambient	-55 to +105°C ambient	-55 to +105°C (maximum)
Vibration	0.002 g ² /Hz (maximum), 5 to 2000 Hz	0.04 g ² /Hz (maximum), 5 to 2000 Hz	0.1 g ² /Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth	30 g, 11 ms sawtooth	40 g, 11 ms sawtooth
Humidity	Up to 95% non-condensing	Up to 95% non-condensing	Up to 95% non-condensing

† Contact factory for airflow rate details.

