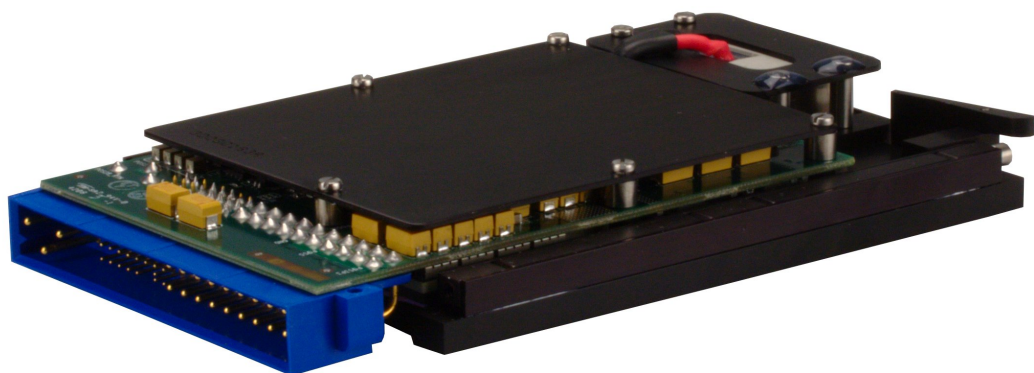


# XPm2000

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 compliant 28V-DC input voltage
- ▶ MIL-STD-461E compliant EMI filtering
- ▶ PICMG 2.11 standard 47 position connector (modified pinout)
- ▶ Up to 200W output on 3.3V, 5V, and  $\pm 12V$
- ▶ 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
- ▶ Conduction or convection cooled
- ▶ -55°C to 65°C convection cooled operating temperature (with 200LFM air flow)
- ▶ -55°C to 85°C conduction cooled operating temperature (at the thermal interface)
- ▶ Two-Level Maintenance support with 1.0-inch pitch
- ▶ 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 200W on 3.3V, 5V, and  $\pm 12V$  at up to 90% efficiency. The XPm2000 also provides on card MIL-STD-461E compliant 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 0.8-in, 0.85-in, and 1.0-in pitch slot. Up to 8.3A on 12V, 2A on -12V, 20A on 5V, and 30.3A on 3.3V can be supported on each rail, separately. The XPm2000 can provide up to a combined 200W of total output power at maximum operating temperature. The XPm2000 can also be paired up with another XPm2000 for load sharing.

# X-ES

Extreme Engineering Solutions

*...Always Fast*

## Extreme Engineering Solutions

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**Input Power**

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

**Output Power**

- Up to 90% efficient
- Supports up to 200W in total combined power output
- 3.3V @ up to 30.3A
- 5V @ up to 20A
- 12V @ up to 8.3A
- -12V @ up to 2A
- Can be paired with another XPm2000 for load sharing

**Hold-up**

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

**Physical Characteristics**

- 3U VPX or cPCI form factor
- PICMG 2.11 standard 47 position connector (modified pinout)
- 0.8-in, 0.85-in\*, or 1.0-in† pitch
- Weight: 1.45 lbs (with on-card hold-up capacitor)
- Weight: 1.1 lbs (without on-card hold-up capacitor)
- \* Supports 2-Level Maintenance
- † Supports 110 ms hold-up capacitor

**Environmental Requirements**

- Contact factory for appropriate board configuration based on environmental requirements.
- Supported ruggedization levels (see chart below): Level 1, Level 2, Level 3, Level 4, Level 5
  - Supports an enhanced level 2 operating temperature from -55°C to 65°C
  - Supports an enhanced level 5 operating temperature from -55°C to 85°C
  - Humidity: 0% to 95% non-condensing

| Ruggedization Level   | Level 1                  | Level 2                  | Level 3                 | Level 4                | Level 5                |
|-----------------------|--------------------------|--------------------------|-------------------------|------------------------|------------------------|
| Cooling Method        | Standard Air-Cooled      | Extended Air-Cooled      | Rugged Air-Cooled       | Conduction-Cooled      | Conduction-Cooled      |
| Operating Temperature | 0 to +55 °C              | 0 to +65 °C              | -40 to +70 °C           | -40 to +70 °C          | -40 to +85 °C          |
| Vibration             | 0.002 g <sup>2</sup> /Hz | 0.002 g <sup>2</sup> /Hz | 0.04 g <sup>2</sup> /Hz | 0.1 g <sup>2</sup> /Hz | 0.1 g <sup>2</sup> /Hz |
| Shock                 | 20 g                     | 20 g                     | 40 g                    | 40 g                   | 40 g                   |
| Storage Temperature   | -40 to +105 °C           | -40 to +105 °C           | -55 to +105 °C          | -55 to +105 °C         | -55 to +105 °C         |

