

XPand6200 Series

Sub-½ ATR, Conduction- or Convection-Cooled Chassis Supporting Conduction-Cooled VPX and PMC or XMC Modules

- ▶ Ideal for rapid deployment
- ▶ Small Form Factor (SFF) sub-½ ATR system
- ▶ Conduction- or convection-cooled chassis
- ▶ Physical dimensions of 4.88 in. (W), 3.61 in. (H), 8.90 in. (L)
- ▶ Supports up to two conduction-cooled VPX modules, 0.8 in. or 1.0 in. pitch
- ▶ Supports up to two conduction-cooled PMC or XMC modules
- ▶ Up to six coaxial SMA RF connections
- ▶ Supports X-ES ruggedized 2.5 in. SATA SSD memory module (optional)
- ▶ Integrated MIL-STD 28 VDC power supply
- ▶ MIL-STD-461 E/F EMI filtering
- ▶ Environmentally sealed
- ▶ Rugged circular connector support
- ▶ Supports front and rear I/O from the internal modules
- ▶ Integration services with third-party modules available



XPand6200 Series

The XPand6200 Series is a true Commercial-Off-The-Shelf (COTS) Rugged system, supporting many 3U VPX, PMC, and XMC modules without modifications to the chassis or backplane to accommodate I/O. This significantly lowers up-front costs (NRE) and facilitates rapid deployment.

With a compact design and weighing less than nine pounds fully loaded, the XPand6200 Series is the industry's smallest rugged system to support at least two 3U VPX slots. The XPand6200 Series provides a SWaP-optimized alternative to traditionally larger slot-based systems; it is an actual Small Form Factor (SFF) system based on COTS 3U VPX modules. The XPand6200 Series supports two conduction-cooled 3U VPX modules and up to two XMC/PCM modules hosted on the VPX modules. The system also supports a removable high-density SATA SSD memory module for secure solid-state storage. With two 130-pin circular connectors, the XPand6200 Series can support all of the rear I/O from two VPX modules. Additionally, the XPand6200 Series can be configured with up to six sealed coaxial SMA connectors to enable RF signals to be routed directly from the front panel of a PMC, XMC, or VPX module.

This fully ruggedized chassis is designed to meet the rigorous standards of MIL-STD-810 and DO-160, while integrating the latest power-saving and performance-enhancing technology. The heat from the internal conduction-cooled modules is conducted to sidewall heat exchangers, where it is dissipated to the ambient environment by convection cooling or to an attached cold plate by conduction cooling. The system includes an integrated 28 VDC power supply and MIL-STD-461 EMI filtering. An optional SATA SSD memory module (with optional integrated encryption) provides the convenience of high-capacity off-the-shelf storage, the ruggedness of solid-state non-volatile memory, and the security of 256-bit AES encryption.

X-ES

Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions

3225 Deming Way, Suite 120 • Middleton, WI 53562

Phone: 608.833.1155 • Fax: 608.827.6171

sales@xes-inc.com • <http://www.xes-inc.com>

Physical Characteristics

- 4.88 in. (W), 3.61 in. (H), 8.90 in. (L)
- Weighs approx. 8.9 lbs., with typical payload cards/RMB
- Weighs approx. 5.8 lbs., without payload cards/RMB

Configuration Options

- Supports two, 0.8 or 1.0 in. pitch, conduction-cooled 3U VPX modules
- Each VPX module can support a PMC or XMC module (depends on PMC/XMC support of the VPX module)
- X-ES ruggedized 2.5 in. SSD module with optional integrated encryption

Front Panel I/O Options

- Two Series 80 circular connectors for I/O (default)
- Up to six coaxial connections routed directly to the front panel of the VPX, XMC, or PMC modules
- Additional connector options available
- Supports the upper half of VPX P1 (Fabrics C and D) from both VPX slots
- Supports all of VPX P2 I/O from both VPX slots

Power Supply Options

- Integrated power supply supports up to 150 W
- MIL-STD-704 28 VDC input voltage support (default)
- MIL-STD-461 EMI filtering
- Additional power supply options available

Thermal

- The chassis, power supply, and internal components are designed and tested to handle ambient temperatures down to -40°C and extreme high temperatures. However high and low temperature performance is dependant on the capabilities of the installed COTS modules.

XPand6200

