



GEN5 XRS

EXTREME RUGGED SERVERS

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XRS is a product line of Extreme Rugged Servers combining superior robustness with high performance computing technology, designed for applications that require a MIL-grade qualified equipment, suitable for operations in very critical environments.

GEN5 XRS series features single or dual socket Intel® Xeon® Processors E5-2600 v4 (Broadwell) ideal for handling highly intensive workloads and supporting a generous number of PCIe 3.0 lanes. The integrated IPMI services support monitoring, control, and management functions sending alarm notifications in case of critical events.

XRS Extreme Rugged Servers are suitable for 19" rack mounting. They have a 4U milled aluminum chassis design to provide superior resistance and are equipped with a MIL grade power input connector. XRS can host up to six full size PCIe boards including GPU, FPGA modules and any other powerful PCI Express board. The front panel includes an elapse timer, and a drive bay for up to three removable SSDs.

XRS Extreme Rugged Servers are qualified to meet MIL-STD-810G for temperature, shocks and vibrations, and conforms to MIL-STD-461 for EMI/EMC. Specific customer's configurations can be delivered fully tested according to the selected MIL specs.



Product Features

-  High performance dual Xeon® architecture
-  IPMI based management
-  Extreme rugged aluminum chassis
-  Optional D38999 circular connectors
-  Optional conformal coating
-  MIL grade qualifications

Technical Specifications

System	
Processor Module	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4 Dual Socket R3 (LGA 2011) supported, CPU TDP support up to 145W
Memory	Up to 1TB Registered ECC RDIMM, DDR4-2133MHz; Up to 2TB 3DS ECC LRDIMM, in 16 DIMM slots
Chipset	Intel® C612
LAN	2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
Serial	2x COM ports (1 x rear + 1 x header)
USB	6x USB 2.0 ports (2 rear + 4 headers) 5x USB 3.0 ports (2 rear + 2 headers + 1 Type A)
Storage	10 SATA3 (6Gbps) port
TPM	TPM Header
I/O Expansion	3x PCIe 3.0 x16, 3x PCIe 3.0 x8
I/O Shield	1x COM, 2x USB 3.0, 2x USB 2.0, 2x LAN, 1x IPMI, 1x VGA
Software	Windows® 10 IoT Enterprise 2016, Windows® Server 2016, Linux, Vmware
IPMI	IPMI2.0, SPM, Watchdog; SNMP and e-mail alarms and notifications
Remote Monitoring	Monitoring, control and management functions (fan speed, temperature, voltage, redundant power failure, power consumption, disk health, raid health, and memory health)

Power Section	
Power Input	AC or DC input single power supply with EMC Filter and MIL D38999 connector Optional AC or DC input redundant power supply

Mechanical Features	
Dimensions (W x D x H)	Width 483 mm Height 177.8 mm - 4U rack Depth 546 mm (chassis body)
Material	Aluminum with surface passivation treatment
Weight	25 Kg (depending on configuration)
Color	Silver / other on request
Mounting	4U 19" rackmount chassis with bridge handles Optional telescopic slides
Front Panel	Power ON Switch and led for power fail 2x USB 3.0, Elapsed Time Indicator
Drive Bay	1x 3.5" drive bay hosting up to 3x 2.5" SSD
Rear Panel	Power Input connector, fuses, ground; 6x Full size slots

Environmental Features	
Operating Temperature	Standard: 0°C / +50°C Extended: -20°C / +60°C (depending on configuration)
Storage Temperature	-40°C / +70°C
Humidity	8% to 95% non-condensed (depending on the configuration)
Fungus	Conformal coating on request
IP Protection	On request
Shock	35g /25 ms according to MIL-STD-810G w/Change1
Vibrations	1.25 mm over frequency 4–14 Hz 2 g over frequency 14–50 Hz 0.3 g over frequency 50–500 Hz According to MIL-STD-810G w/Change1
Electromagnetic Compatibility	According to MIL-STD-461F



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