GOMA
RUGGED SOLUTIONS



XRS 3U-IP SERIES

EXTREME RUGGED SERVERS
IP54 RATED

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XRS 3U-IP Series

EXTREME RUGGED SERVERS

XRS is a 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 environment.

XRS 3U-IP features a powerful single or dual socket Intel® Xeon® Platform suitable for the most intense 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 3U-IP Extreme Rugged Server has an IP54 protection rate and features a 3U milled aluminium chassis designed to provide for superior resistance. The unit is equipped with MIL grade connectors for I/O ports and for power input. 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 VGA, IPMI LAN, USB 3.0 and USB 2.0 and a removable battery holder. Two 3.5" drive bays can host up to six removable SSDs.

XRS 3U-IP Extreme Rugged Servers are qualified according to 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 integrated and tested.



Product Features

- High Performance Dual Xeon® Architecture
- IPMI Based Management
- Extreme Rugged Aluminum Chassis
- IP54 Protection Grade
- D38999 Circular Connectors and Conformal Coating
- MIL Grade Qualifications

Technical Specifications

System	
CPU	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, Dual Socket LGA-3647 (Socket P) supported, CPU TDP support up to 140W TDP
Memory	Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; DDR4-2933MHz, in 8 DIMM slots
Chipset	Intel® C621
Network Connectivity	2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
Serial	1x COM Port (1 header)
USB	4x USB 2.0 ports (2 rear + 2 via headers) 3x USB 3.2 Gen1 ports (2 via headers + 1 Type A)
Storage	10 SATA3 (6Gbps) port
TPM	TPM header
Expansion slots	2x PCIe 3.0 x16, 3x PCIe 3.0 x8, 1x PCIe 3.0 x4 (in x8 slot) M.2 Interface: 1 SATA/PCIe 3.0 x4, Form Factor: 2260, 2280; Key: M-Key
Operative Systems	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

Mechanical Features	
Dimensions (W x D x H)	Width 483mm Depth 530mm overall Height 132mm - 3U rack
Material	Aluminum with surface passivation treatment
Weight	19,5 Kg (depending on configuration)
Colour	Black / other on request
Mounting	3U 19" rackmount chassis with bridge handles Optional telescopic slides
Front Panel / Leds / Buttons / Connectors	LEDs for Power ON and SYS Fail Power On Switch Protected by the front panel: 1x VGA, 2x USB 3.0, 2x USB 2.0, IPMI LAN, Removable Battery
Rear Panel / Leds / Buttons / Conectors	Power Input connector, D38999 MIL type connectors
Drive Bay	2x 3.5" drive bays hosting up to 6x 2.5" SSD

Environmental Features	
Operating Temperature	Standard: -5°C to +55°C according to MIL-STD-810G Change 1 (501.6 & 502.6) Extended: -20°C to +60°C (depending on configuration)
Storage Temperature	-40°C to +71°C according to MIL-STD-810G Change 1 (501.6 & 502.6)
Humidity	5% to 95% non-condensed according to MIL-STD-810G Change 1 (506.7 Procedure II)
Fungus	Conformal coating on request
IP Protection	IP54
Shock	20g, 11ms functional shock on each direction, according to MIL-STD-810G Change 1 (516.7 Procedure I) 40g, 11ms crash hazard shock on each direction, according to MIL-STD-810G Change 1 (516.7 Procedure V)
Vibrations	Functional : MIL-STD-810G Change 1 (514.7, Category 20 Procedure I - Wheeled vehicle) Transportation: MIL-STD-810G Change 1 (514.7, Category 7 Procedure I - General exposure)
EMC / Electromagnetic Compatibility	According to MIL-STD-461G

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