

GAP-251F - G6 Series 2U RUGGED SERVER



Intel® Xeon® Scalable Processors
Front I/O - Rear Power Supply



GAP is a line of rugged servers and workstations with aluminum construction, designed for applications that require a robust and qualified MIL-GRADE device, suitable for operating in critical environments.

GAP-251F G6 series rugged server features single or dual socket Intel® Xeon® Scalable Processors (Skylake-SP / Cascade Lake-SP) supporting up to 28 cores and 56 thread, up to 38.5 MB cache, Intel® Ultra Path Interconnect, Intel® AVX-512, up to six memory channels and up to 48 PCIe 3.0 lanes. The integrated IPMI services support monitoring, control, and management functions and provides for alarm notifications in case of critical events.

GAP-251F is designed for 19" rackmounting and has a 2U chassis with 510mm depth.

The front I/O and rear power supply layout includes three removable SSD, three internal SSD and an optional slim DVD. GAP-251F rugged servers can host up to two low profile PCIe cards and two standard PCIe cards and one dual slot PCIe card.

The additional boards are equipped with dedicated fixing systems to ensure optimal operation even in the presence of shock and vibration or during transport.

GAP servers are qualified according to MIL-STD-810G for temperature, shock and vibration and can optionally conform to MIL-STD-461 for EMI /EMC. Upon request, the integrated devices, complete with I / O cards, can be subjected to specific profiles of thermal or mechanical stress. Versions with MIL grade connectors on I/O ports and power input are available.

All units are delivered with their inventory list to ensure configuration control and reproducibility over time.

FEATURES

- 2U Rugged Server - 510mm depth
- Single or Dual Processor
- Intel® Xeon® Scalable Processors
- Front I/O connectors
- Rear Power Input
- Redundant AC or DC Power Supply
- Up to 3 removable 2.5" SSD + 3 internal 2.5" SSD
- Optional DVD
- Up to 5 PCIe boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

Technical Specifications

System

Processor	Intel® Xeon® Scalable Processors Family (up to 205W TDP) - dual socket P (LGA 3647) - Up to 28 cores
Memory	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz
Chipset	Intel® C621
Network	2 x RJ45 Gigabit Ethernet 1 x RJ45 dedicated IPMI
Storage	2.5" SATA Disk - RAID 0, 1, 5, 10
TPM	1 TPM Header
Motherboard I/O	Available on the front: 1 x VGA, 4 x USB 3.0, 2 x GbE, 1 x IPMI
Expansion slots	3 x PCIe - Bracket Full Height 2 x PCIe - Bracket Low profile
Operative Systems	Windows® 8.1, Windows® 10 IoT Enterprise 2016, Windows® Server 2008 R2, Windows® Server 2012 R2, Linux, VmWare
IPMI	IPMI2.0, SPM, Watchdog; SNMP and e-mail alarms and notifications
Monitoring	Monitoring, control, and management functions (fan speed, temperature, voltage, redundant power failure, power consumption, disk health, raid health, and memory health)

Power Supply

Power Supply	100/240 Redundant VAC 18-36 Single or Redundant VDC 36-72 Single or Redundant VDC
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Mechanical

Dimensions	483 x 88 x 510 mm
Construction	Aluminum with surface passivation treatment
Colour	Silver
Mounting	2U 19" rackmount chassis Telescopic slides optional
Configuration	Front I/O and Rear Power Supply
Front Panel	Led: Led Power ON and HDD/SSD functionality; Switch: Power ON / OFF and System Reset
Drive Bay	1 x slim 5.25"; 1 x 3.5" bay + 1 x internal bay x 3 ODD 2.5"

Environmental - (Design to meet)

Operative Temperature	Standard: 0°C / +50°C Extended: -20°C / +60°C (depending on the configurations)
Operative Humidity	8% to 95% non-condensed (depending on the configurations)
Storage Temperature	-40°C / +70°C
Vibrations	MIL-STD-810G, Method 514.7, Cat 4 - Proc. I - 2.24 Grms, 5-500 Hz 60 min/axis for 3 axes
Operative Shock	MIL-STD-810G Proc. I Method 516.7 - 15g / 11ms - half sine
Transport shock	MIL-STD-810G Proc. II Method 516.7 - 30g / 9ms sawtooth
Certifications	Directive 2014/35/UE-LVD / Directive 2014/30/UE-EMC Directive 2011/65/UE - RoHS / Regulation (EC) No 1907/2006 - REACH

GAP servers and workstations are designed in accordance with the environmental specifications indicated. Some parameters depend on the configuration. Equipment may be subjected to dedicated test profiles.