

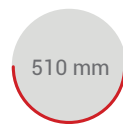
# GAP-251R - G5 Series 2U RUGGED SERVER

Intel® Xeon® Broadwell-EP

Rear I/O - Rear Power Supply



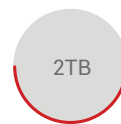
Platform



Depth



CPU



RAM



SSD



I/O Boards

**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-251R G5 series rugged server features single or dual socket Intel® Xeon® E5 v4 (Broadwell-EP) supporting up to 22 cores (44 threads with Hyper-Threading Technology), up to 55 MB of L3 cache per CPU, 2400MHz DDR4 up to 2TB and 40 PCIe lanes. The integrated IPMI services support monitoring, control, and management functions and provides for alarm notifications in case of critical events.

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

The rear I/O and rear power supply layout includes twelve removable SSD and an optional slim DVD.

GAP-251R rugged servers can host 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
- E5 Series Intel® Xeon® processors - Broadwell-EP
- Rear I/O connectors
- Rear Power Input
- Redundant AC or DC Power Supply
- Up to 12 removable 2.5" SSD
- Optional DVD
- Up to 5 PCIe boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

## Technical Specifications

### System

<b>Processor</b>	Intel® Xeon® E5-2600 v4/v3 (up to 145W TDP) dual socket R3 (LGA 2011) - Up to 22 cores
<b>Memory</b>	Up to 1TB 3DS ECC RDIMM, DDR4-2400MHz Up to 2TB 3DS ECC LRDIMM, DDR4-2400MHz
<b>Chipset</b>	Intel® C612
<b>Network</b>	2 x RJ45 Gigabit Ethernet 1 x RJ45 dedicated IPMI
<b>Storage</b>	2.5" SATA Disk - RAID 0, 1, 5, 10
<b>TPM</b>	1 TPM Header
<b>Motherboard I/O</b>	Available on the rear: 1 x VGA; 4 x USB 3.0, 2 x GbE, 1 x IPMI
<b>Expansion slots</b>	3 x PCIe - Bracket Full Height 2 x PCIe - Bracket Low profile
<b>Operative Systems</b>	Windows® 7, Windows® 8.1, Windows® 10 IoT Enterprise 2016, Windows® Server 2008 R2, Windows® Server 2012 R2, Linux
<b>IPMI</b>	IPMI2.0, SPM, Watchdog; SNMP and e-mail alarms and notifications
<b>Monitoring</b>	Monitoring, control, and management functions (fan speed, temperature, voltage, redundant power failure, power consumption, disk health, raid health, and memory health)

### Power Supply

<b>Power Supply</b>	100/240 Redundant VAC 18-36 Single or Redundant VDC 36-72 Single or Redundant VDC
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### Mechanical

<b>Dimensions</b>	483 x 88 x 510 mm
<b>Construction</b>	Aluminum with surface passivation treatment
<b>Colour</b>	Silver
<b>Mounting</b>	2U 19" rackmount chassis Telescopic slides optional
<b>Configuration</b>	Rear I/O and Power Supply
<b>Front Panel</b>	Led: Led Power ON and HDD/SSD functionality; Switch: Power ON / OFF and System Reset; Connectors: 2 x USB 2.0
<b>Drive Bay</b>	1 x slim 5.25"; 4 x 3.5" bay + 1 x internal bay x 3 ODD 2.5"

### Environmental - (Design to meet)

<b>Operative Temperature</b>	Standard: 0°C / +50°C Extended: -20°C / +60°C (depending on the configurations)
<b>Operative Humidity</b>	8% to 95% non-condensed (depending on the configurations)
<b>Storage Temperature</b>	-40°C / +70°C
<b>Vibrations</b>	MIL-STD-810G, Method 514.7, Cat 4 - Proc. I - 2.24 Grms, 5-500 Hz 60 min/axis for 3 axes
<b>Operative Shock</b>	MIL-STD-810G Proc. I Method 516.7 - 15g / 11ms – half sine
<b>Transport shock</b>	MIL-STD-810G Proc. II Method 516.7 - 30g / 9ms sawtooth
<b>Certifications</b>	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.