

# GAP-151P - G6 Series

## 1U RUGGED SERVER



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

**powerBridge**  
Computer

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

GAP-151P G6 rugged servers feature 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 sending alarm notifications in case of critical events.

The layout with front I/O and power supply has all the connectors placed at the front of the chassis as required for "front only" installations.

GAP-151P rugged servers feature an internal 2,5" SSD and can host up to two PCIe cards.

In case additional boards are needed they can be provided with dedicated fixings for an optimal protection against shocks and vibrations also during transport.

GAP servers are designed to meet MIL-STD-810F for temperature and shocks, MIL-STD-167-1A for vibrations. Optionally, they can conform to MIL-STD-461 for EMI /EMC.

The I/O connectors and the power supply input can be provided with MIL-GRADE connectors upon request.

All units are delivered with their inventory list to ensure configuration control and reproducibility over time. Upon request, all server configurations can run specific thermal or mechanical environmental stress test.

### FEATURES

- 1U Rugged Server - 510mm depth
- Single or Dual Processor
- Intel® Xeon® Scalable Processors
- Front I/O connectors
- Front Power Input
- Redundant AC or DC Power Supply
- 1 x internal 2.5" SSD
- Up to 2 PCIe boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

## Technical Specifications

### System

<b>Processor</b>	Intel® Xeon® Scalable Processors Family - dual socket P (LGA 3647)
<b>Memory</b>	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz
<b>Chipset</b>	Intel® C621
<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 at the front: 1 x VGA, 4 x USB 3.0, 2 x GbE, 1 x IPMI
<b>Expansion slots</b>	2 x PCIe - Bracket Full Height
<b>Operative Systems</b>	Windows® 8.1, Windows® 10 IoT Enterprise 2016, Windows® Server 2008 R2, Windows® Server 2012 R2, Linux, VmWare
<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 44,45 x 510 mm
<b>Construction</b>	Aluminum with surface passivation treatment
<b>Colour</b>	Silver / RAL9007
<b>Mounting</b>	1U 19" rackmount chassis Optional telescopic slides
<b>Configuration</b>	Front I/O and Power Supply
<b>Front Panel</b>	Led Power ON and HDD/SSD functionality; Power ON / OFF and System Reset
<b>Drive Bay</b>	1 x internal SSD 2.5"

### Environmental - (Design to meet)

<b>Operating Temperatures</b>	0°C to +50°C MIL-STD-810H, Method 501.7 & 502.7 -20°C to +60°C (depending on configuration)
<b>Storage Temperature</b>	-40°C to +70°C MIL-STD-810H, Method 501.7 & 502.7
<b>Humidity</b>	5% – 95% non-condensing MIL-STD-810H 507.6
<b>Operating Vibrations</b>	MIL-STD-167-1A, Type I
<b>Not Operating Vibrations</b>	1.17 Grms, 5-500 Hz MIL-STD-810H, Method 514.8
<b>Operating Shocks</b>	20g / 11ms – half sine MIL-STD-810G, Method 516.7
<b>EMC</b>	Directive 2014/35/UE-LVD   Directive 2014/30/UE-EMC   Directive 2011/65/UE - RoHS Regulation EC No 1907/2006   MIL-STD-461G (on request)

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.