# GAP-151P - G6 Series
## 1U RUGGED SERVER

Intel® Xeon® Scalable Processors

Front I/O - Front Power Supply

| 1U | 510 mm | 1-2 | 3TB | 1 | 2 |
|---|---|---|---|---|---|
| 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-151P 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-151P is designed for 19" rackmounting and has a 1U chassis with 510mm depth.
The front I/O and power supply layout includes all the connectors on the front of the chassis as required for front only installations.
GAP-151P rugged servers features an internal 2,5" SSD and can host up to two PCIe cards.
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

- 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

| | |
|---|---|
| **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<br>Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz |
| **Chipset** | Intel® C621 |
| **Network** | 2 x RJ45 Gigabit Ethernet<br>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** | 2 x PCIe - Bracket Full Height |
| **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

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|---|---|
| **Power Supply** | 100/240 Redundant VAC<br>18-36 Single or Redundant VDC<br>36-72 Single or Redundant VDC |

## Mechanical

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|---|---|
| **Dimensions** | 483 x 44,45 x 510 mm |
| **Construction** | Aluminum with surface passivation treatment |
| **Colour** | Silver |
| **Mounting** | 1U 19" rackmount chassis<br>Telescopic slides optional |
| **Configuration** | Front I/O and Power Supply |
| **Front Panel** | Led: Led Power ON and HDD/SSD functionality; Switch: Power ON / OFF and System Reset |
| **Drive Bay** | 1 x internal SSD 2.5" |

## Environmental - (Design to meet)

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|---|---|
| **Operative Temperature** | Standard: 0°C / +50°C<br>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<br>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.