

# GAP-251P - G7 Series

## 2U RUGGED WORKSTATION

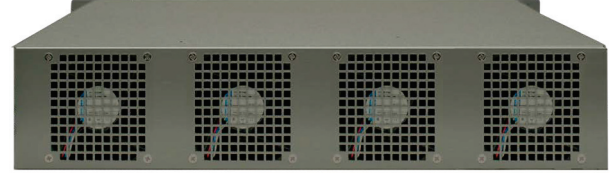


Intel® Xeon® E-2200/2100, 8th/9th Gen. Intel® Core™ i3 - Coffee Lake  
Front I/O - Front Power Supply

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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-251P G7 workstations feature single socket Intel® Xeon® E-2200/2100 or 8th/9th Gen. Intel® Core® i3 (Coffee Lake) processors supporting up to 8 Cores (16 thread with Hyper-Threading), 16MB Smart Cache, up to 128GB DDR4 memory with our without ECC and up to 16 PCIe 3.0 lanes. The integrated IPMI services support monitoring, control, and management functions sending alarm notifications in case of critical events.

GAP-251P are designed for 19" rackmounting and have a 2U chassis with a depth of 510mm.

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-251P rugged workstations include up to three removable SSDs, three internal SSDs and an optional slim DVD. The unit may host one low profile PCIe cards and 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 workstations 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

- 2U Rugged Workstation - 510mm depth
- Intel® Xeon® E-2200/2100 processor
- 8th/9th Gen. Intel® Core™ i3
- Front I/O connectors
- Front Power Input
- Redundant AC or DC Power Supply
- Up to 3 removable 2.5" SSD + 3 x internal 2.5" SSD
- Optional DVD
- Up to 3 PCIe boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

## Technical Specifications

### System

<b>Processor</b>	Intel® Xeon® E-2200/2100, 8th/9th Gen. Intel® Core™ i3 – single socket H4 (LGA 1151)
<b>Memory</b>	Up to 128GB ECC UDIMM, DDR4-2600MHz
<b>Chipset</b>	Intel® C246
<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>SATA</b>	6 SATA3 ports (6Gbps); RAID 0, 1, 5, 10
<b>TPM</b>	1 TPM Header
<b>Motherboard I/O</b>	Available at the front: 1 x VGA, 2 x USB 2.0, 2 x USB 3.1, 1 x COM, 2 x LAN, 1 x IPMI
<b>Expansion slots</b>	2x PCIe - Bracket Full Height 1x PCIe - Low Profile
<b>Operative Systems</b>	Windows® Server 2012 R2; Windows® Server 2016; Windows® Server 2019; Ubuntu 18.04 LTS; CentOS 7.5; Windows® 10 64bit
<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 / RAL9007
<b>Mounting</b>	2U 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 slim 5.25"; 1 x 3.5" bay + 1 x internal bay x 3 ODD 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.