

GAP-245PL - G7 Series 2U RUGGED WORKSTATION



Intel® Xeon® E-2200/2100, 8th/9th Gen. Intel® Core™ i7/i5/i3 - Coffee Lake
Front I/O - Front Power Supply

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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-245RL G7 Intel® Xeon® E-2200/2100 or 8th/9th Gen. Intel® Core® i7/i5/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-245PL are designed for 19" rackmounting and have a 2U chassis with 245mm depth.

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-245PL series rugged workstations can integrate up to five low profile cards and feature rear removable fans.

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 - 450mm depth
- Intel® Xeon® E-2200/2100 series
- 8th/9th Gen. Intel® Core™ i7/i5/i3 series
- Front I/O connectors
- Front Power Input
- Removable fans
- Redundant AC or DC Power Supply
- Up to 3 SSD Hot Swap (Max 2 x NVME)
- Up to 5 Low Profile boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

Technical Specifications

System

Processor	Intel® Xeon® E3-2200/2100, 8th/9th Gen. Intel® Core™ i7/i5/i3, Intel® Celeron® and Intel® Pentium®
Memory	Up to 128GB ECC/non-ECC UDIMM, DDR4-2666MHz
Chipset	Intel® C246
Network	1 x GbE LAN with Intel® i210-AT 1 x GbE LAN with Intel® I219lm
Storage	8 SATA3 ports (6Gbps); RAID 0, 1, 5, 10
TPM	1 TPM Header
Motherboard I/O	Available at the front: 1 x VGA (IPMI), 4 x USB 3.1, 2 x LAN, 1 x HDMI, 1 x DVI-D, 1 x DP, Audio
Expansion slots	2 PCI-E 3.0 x16 (run at NA/16 or 16/8/8) 1 PCI-E 3.0 x4 (shared with M.2-M1) 1 PCI-E 3.0 x 1 1 PCI 2 M.2 M-Key 1 U.2 (shared with M.2-M2)
Operative Systems	Windows® 10 IoT Enterprise 2016, Windows® Server 2016, Windows® Server 2019, Linux
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 450 mm
Construction	Aluminum with surface passivation treatment
Colour	Silver / RAL 9007
Mounting	2U 19" rackmount chassis Optional telescopic slides
Configuration	Front I/O and Power Supply
Front Panel	Led Power ON and SSD functionality; Power ON / OFF and System Reset
Drive Bay	1 x slim 5.25" ; 1 x 3.5" bay

Environmental - (Design to meet)

Operating Temperatures	0°C to +50°C MIL-STD-810H, Method 501.7 & 502.7 -20°C to +60°C (depending on configuration)
Storage Temperature	-40°C to +70°C MIL-STD-810H, Method 501.7 & 502.7
Humidity	5% – 95% non-condensing MIL-STD-810H 507.6
Operating Vibrations	MIL-STD-167-1A, Type I
Not Operating Vibrations	1.17 Grms, 5-500 Hz MIL-STD-810H, Method 514.8
Operating Shocks	20g / 11ms – half sine MIL-STD-810G, Method 516.7
EMC	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.