GAP-245PL - G7 Series
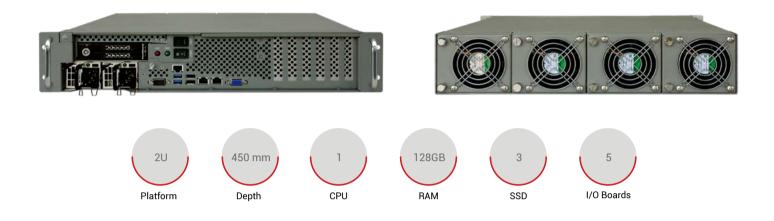## 2U RUGGED WORKSTATION

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

Platform	Depth	CPU	RAM	SSD	I/O Boards
2U	450 mm	1	128GB	3	5

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 operating in critical environments.

GAP-245RL G7 Intel® Xeon® E-2200/2100 or Intel® 8th/9th Gen. 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-245PL are designed for 19" rackmounting and have a 2U chassis with 245mm depth.
The front I/O motherboard and power supply configuration offers all motherboard and integrated board ports at the front of the chassis for "front only" installations. GAP-245PL series rugged workstations can integrate up to five low profile cards.

GAP workstations are designed to meet according to MIL-STD-810F for temperature and shocks, MIL-STD-167-1A for vibrations and can optionally conform to MIL-STD-461 for EMI /EMC.
Upon request the I/O connectors and the power supply input can be provided with MIL-GRADE connectors.

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
- Single Intel® Xeon® E-2200/2100 series
- Single Intel® 8th/9th Gen. Core™ i7/i5/i3
- Front I/O connectors
- Front Power Input
- Redundant AC or DC Power Supply
- Up to 3 SSD Hot Swap (Max 2 x NVME)
- Optional DVD
- 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, Intel® 8th/9th Gen. 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 on 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

Mechanical

Dimensions	483 x 88 x 450 mm
Construction	Aluminum with surface passivation treatment
Colour	Silver
Mounting	2U 19" rackmount chassis 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 slim 5.25" ; 1 x 3.5" bay

Environmental - (Design to meet)

Operative Temperature	Standard: 0°C / +50°C 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 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.