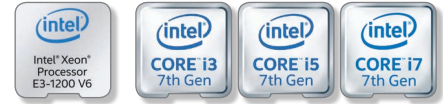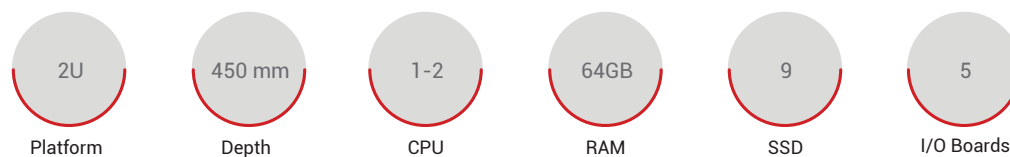# GAP-245RL - G6 Series
2U RUGGED WORKSTATION

Intel® Xeon® E3-1200 v5/v6, Intel® 6th/7th Gen. Core™ i7/i5/i3 series - Kaby Lake / Sky Lake
Rear I/O - Rear Power Supply

2U	450 mm	1-2	64GB	9	5
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-245RL G6 series rugged workstations features Intel® Xeon® E3-1200 v5/v6, Intel® 6th/7th Gen. Core i7/i5/i3 series (Kaby Lake / Sky Lake) processors supporting up to 4 Cores (8 thread with Hyper-Threading), 8MB Smart Cache, up to 64GB DDR4 memory with or without ECC and up to 16 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-245RL is designed for 19" rackmounting and has a 2U chassis with 245mm depth.
The rear I/O and rear power supply layout includes nine removable SSD and an optional slim DVD.
GAP-245RL rugged workstations can host six low profile cards.

GAP workstations 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

- 2U Rugged Workstation - 450mm depth
- Single Intel® Xeon® E3-1200 v5/v6 series
- Single Intel® 6th/7th Gen. Core™ i7/i5/i3 series
- Rear I/O connectors
- Rear Power Input
- Redundant AC or DC Power Supply
- Up to 9 removable 2.5" SSD
- Optional DVD
- Up to 5 Low Profile boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

Technical Specifications

System

Processor	Intel® Xeon® E3-1200 v5/v6, Intel® 6°/7° Gen. Core™ i7/i5/i3, Intel® Celeron® e Intel® Pentium®
Memory	Up to 64GB ECC/non-ECC UDIMM, DDR4-2400MHz
Chipset	Intel® C236
Network	1 x GbE LAN with Intel® i210-AT 1 x GbE LAN with Intel® I219lm
Storage	6 SATA3 ports (6Gbps); RAID 0, 1, 5, 10
TPM	1 TPM Header
Motherboard I/O	Available on the rear: 1 x VGA, 2 x USB 2.0, 2 x USB 3.0, 2 x LAN, 1 x HDMI, 1 x DVI, Audio
Expansion slots	3 PCI-E 3.0 x16 (run at 16/NA/16 or 16/8/8), 1 PCI-E 3.0 x1 (in x4) 1 5V PCI 32-bit slots M.2 Interface: 1 PCI-E 3.0 x4 Form Factor : 2242/2260/2280 - Key: M-Key
Operative Systems	Windows® 7, Windows® 8.1, Windows® 10 IoT Enterprise 2016, Windows® Server 2008 R2, Windows® Server 2012 R2, Windows® Server 2016, 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	Rear 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"; 3 x 3.5" bay + 1 x internal bay x 3 ODD 2.5"

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.