

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



Intel® Xeon® E-2200/2100, 8th/9th Gen. Intel® Core™ i7/i5/i3 - Coffee Lake  
Rear I/O - Rear 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-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 or 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-245RL are designed for 19" rackmounting and have a 2U chassis with a depth of 245mm.

The rear I/O and rear power supply layout includes nine removable SSDs and an optional slim DVD.

GAP-245RL rugged workstations can host five low profile PCIe cards.

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
- 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

<b>Processor</b>	Intel® Xeon® E3-2200/2100, 8th/9th Gen. Intel® Core™ i7/i5/i3, Intel® Celeron® and Intel® Pentium®
<b>Memory</b>	Up to 128GB ECC/non-ECC UDIMM, DDR4-2666MHz
<b>Chipset</b>	Intel® C246
<b>Network</b>	1 x GbE LAN with Intel® i210-AT 1 x GbE LAN with Intel® I219lm
<b>Storage</b>	8 SATA3 ports (6Gbps); RAID 0, 1, 5, 10
<b>TPM</b>	1 TPM Header
<b>Motherboard I/O</b>	Available at the rear: 1 x VGA (IPMI), 4 x USB 3.1, 2 x LAN, 1 x HDMI, 1 x DVI-D, 1 x DP, Audio
<b>Expansion slots</b>	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 x1 1 PCI 2 M.2 M-Key 1 U.2 (shared with M.2-M2)
<b>Operative Systems</b>	Windows® 10 IoT Enterprise 2016, Windows® Server 2016, Windows® Server 2019, Linux
<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 450 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>	Rear 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"; 3 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.