GAP-245R-W9

2U Rugged Workstation - Rear I/O - Rear Power Supply

14th/13th Gen Intel® Core™ i9/i7/i5/i3 Processors





GAP is a product family of rugged aluminium servers and workstations designed for applications that require robust and qualified MIL-GRADE equipment, suitable for operations in critical environments.

2U	450 MM	1	192GB	9	2
PLATFORM	DEPTH	CPU	RAM	SSD	I/O BOARDS

GAP-245R-W9 workstations feature 14th/13th Gen. Intel® Core™ i9/i7/i5/i3 Processors, harnessing state-of-the-art computing innovations to deliver exceptional performance, improved energy efficiency, and robust support for advanced AI capabilities and high-speed connectivity. The integrated IPMI services support monitoring, control, and management functions sending alarm notifications in case of critical events.

GAP-245R-W9 are designed for 19" rackmounting and have a 2U chassis with a depth of 450mm. The rear I/O and rear power supply layout offers versatile storage options, including support for three on board M.2 NVME SSD and either up to three 2.5" SAS SSD or six U.2 NVMe SSD or nine 2.5" SATA removable SSD.
GAP-245RL-W9 rugged workstation can host two full height PCIe cards.

Additional boards can be provided with a dedicated retainer kit for an optimal protection against shocks and vibrations also during transport.

GAP series workstations are designed to meet MIL-STD-810 for temperature and shocks, MIL-STD-167-1A for vibrations. Optionally, they can conform to MIL-STD-461G 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.

Technical Specifications

System

CPU	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Processors, Single Socket LGA-1700 supported, Up to 125W TDP
Memory	192GB Unbuffered ECC/non-ECC UDIMM, DDR5-4400MT/s, 4 DIMM Slots
Chipset	Intel® W680
Graphics	1 Aspeed AST2600 BMC port
Network Connectivity	1x RJ45 Dedicated IPMI LAN port 1x RJ45 Gigabit Ethernet LAN ports 1x RJ45 2.5 Gigabit Ethernet LAN port
Storage	Internal: 3 x M.2 PCIe 4.0 x4 Form Factor: 2280; M.2 Key: M-Key (RAID 0, 1, 5) Removable: Up to 3x 2.5" SAS SSD or Up to 6x U.2 NVMe SSD or Up to 9x 2.5" SATA SSD
TPM	1x TPM Header
Motherboard I/O shield	3x USB 3.2, 1x USB 3.2 Type C; 2x GbE, 1x IPMI LAN, Audio, HDMI, DVI-D, DP, VGA (available on the rear panel)
Expansion slots	1x PCIe x16 (top position - Dual slot card) and 1x PCIe x4 (bottom position)
Operative Systems	Windows® 11 IoT Enterprise, Windows® 10 IoT Enterprise, Windows® Server 2022, Debian Linux 11 (64-bit); Ubuntu Linux 18.04 LTS Server Edition (64-bit); Ubuntu Linux 20.04 LTS Server Edition (64-bit); Red Hat® Enterprise Linux® 8 Server
IPMI	IPMI2.0, SPM, Watchdog; SNMP and e-mail alarms and notifications
Remote 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	AC Redundant Power Supply - Optional Single DC Redundant Power Supply - Optional Single

Mechanical

Dimensions	483 x 88 x 450 mm (W x H x D)
Material	Aluminum with surface passivation treatment
Colour	Black / RAL 9005 - Powder Coating
Mounting	2U 19" rackmount chassis Optional Telescopic slides
Configuration	Rear I/O - Rear Power Supply
Front Panel Leds / Buttons / Connectors	Power On/Off button with LED Reset button with LED 2x USB 3.0
Fans	3x internal PWM fans

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.