

GAP-351R - G7 Series 3U RUGGED WORKSTATION



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



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-351R G7 series workstations Intel® Xeon® E-2200/2100 or Intel® 8th/9th Gen. Core™ i7/i5/i3 series (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 and provides for alarm notifications in case of critical events.

The rear I/O and power supply layout includes fifteen removable SSD, three internal SSD and an optional slim DVD.

The unit may host up to five full height / full length PCIe cards.

The additional boards are equipped with dedicated fixing systems to ensure optimal operation even in the presence of shock and vibration or during transport.

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

- 3U Rugged Workstation - 510mm depth
- Single Intel® Xeon® E-2200/2100 series
- Single Intel® 8th/9th Gen. Core™ i7/i5/i3
- Rear I/O connectors
- Rear Power Input
- Redundant AC or DC Power Supply
- Up to 15 removable 2.5" SSD + 3 x internal 2.5" SSD
- Optional DVD
- Up to 5 PCIe 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 (6Gbps) ports; RAID 0, 1, 5, 10
TPM	1 TPM Header
Motherboard I/O	Available on 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
Expansion slots	2 PCI-E 3.0 x16 (run at NA/16 o 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 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 133 x 510 mm
Construction	Aluminum with surface passivation treatment
Colour	Silver
Mounting	3U 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; Connectors: 2x USB 2.0
Drive Bay	1 x slim 5.25"; 5 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.