

# GAP-151F - G7 Series 1U RUGGED WORKSTATION



Intel® Xeon® E-2200/2100, Intel® 8th /9th Gen. Core™ i3 - Coffee Lake  
Front 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-151F G7 series workstations feature single socket 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 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-151F is designed for 19" rackmounting and has a 1U chassis with 510mm depth. The front I/O and rear power supply layout includes three removable SSD, an internal SSD and an optional slim DVD.

GAP-151F rugged workstation can host up to two 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

- 1U Rugged Workstation - 510mm depth
- Single Intel® Xeon® E-2200/2100 series
- Single Intel® 8th/9th Gen. Core™ i3 series
- Front I/O connectors
- Rear Power Input
- Redundant AC or DC Power Supply
- Up to 3 x removable 2.5" SSD + 1 x internal 2.5" SSD
- Optional DVD
- Up to 2 PCIe boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

## Technical Specifications

### System

<b>Processor</b>	8th/9th Generation Intel® Core™ i3/Pentium®/Celeron®, Intel® Xeon® E-2200/2100 Processor (up to 95W) - Single Socket LGA-1151 (Socket H4)
<b>Memory</b>	Up to 128GB ECC UDIMM, DDR4-2600MHz
<b>Chipset</b>	Intel® C246
<b>Network</b>	2 x RJ45 Gigabit Ethernet 1 x RJ45 dedicated to IPMI
<b>Storage</b>	2.5" SATA Disk - RAID 0, 1, 5, 10
<b>SATA</b>	6 SATA3 (6Gbps) ports; RAID 0, 1, 5, 10
<b>TPM</b>	1 TPM Header
<b>Motherboard I/O</b>	Available on the front: 1 x VGA, 2 x USB 2.0, 2 x USB 3.1, 1 x COM, 2 x LAN, 1 x IPMI
<b>Expansion slots</b>	2x PCIe - Bracket Full Height
<b>Operative Systems</b>	Windows® Server 2012 R2; Windows® Server 2016; Windows® Server 2019; Ubuntu 18.04 LTS; CentOS 7.5; Windows® 10 64bit
<b>IPMI</b>	IPMI2.0, SPM, Watchdog; SNMP and e-mail alarms notification
<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 44,45 x 510 mm
<b>Construction</b>	Aluminum with surface passivation treatment
<b>Colour</b>	Silver
<b>Mounting</b>	1U 19" rackmount chassis Telescopic slides optional
<b>Configuration</b>	Front I/O and Rear Power Supply
<b>Front Panel</b>	Led: Led Power ON and HDD/SSD functionality; Switch: Power ON / OFF and System Reset
<b>Drive Bay</b>	1 x slim 5.25"; 2 x 3.5" bay + 1 x internal ODD 2.5"

### Environmental - (Design to meet)

<b>Operative Temperature</b>	Standard: 0°C / +50°C Extended: -20°C / +60°C (depending on the configurations)
<b>Operative Humidity</b>	8% to 95% non-condensed (depending on the configurations)
<b>Storage Temperature</b>	-40°C / +70°C
<b>Vibrations</b>	MIL-STD-810G, Method 514.7, Cat 4 - Proc. I - 2.24 Grms, 5-500 Hz 60 min/axis for 3 axes
<b>Operative Shock</b>	MIL-STD-810G Proc. I Method 516.7 - 15g / 11ms - half sine
<b>Transport shock</b>	MIL-STD-810G Proc. II Method 516.7 - 30g / 9ms sawtooth
<b>Certifications</b>	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.