GAP-251F - G7 Series
2U RUGGED WORKSTATION

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

powerBridge Computer

Ehlbeek 15a
30938 Burgwedel
fon 05139-9980-0
fax 05139-9980-49

www.powerbridge.de
info@powerbridge.de

2U	510 mm	1	128GB	3+3	4
Platform	Depth	CPU	RAM	SSD	I/O Boards

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-251F G7 workstations feature single socket Intel® Xeon® E-2200/2100 or 8th/9th Gen. Intel® Core® i3 (Coffee Lake) processors supporting up to 8 Cores (16 thread with Hyper-Threading), 16MB Smart Cache, up to 128GB DDR4 memory with our 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.

The front I/O and rear power supply layout includes three removable SSDs, three internal SSDs and an optional slim DVD.
GAP-251F rugged workstations can host one low profile PCIe cards and two PCIe cards.
In case additional boards are needed they can be provided with dedicated fixings for an optimal protection against shocks and vibrations also during transport.

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 - 510mm depth
- Intel® Xeon® E-2200/2100 processor
- 8ª/9ª Gen. Intel® Core™ i3
- Front I/O connectors
- Rear Power Input
- Redundant AC or DC Power Supply
- Up to 3 removable 2.5" SSD + 3 x internal 2.5" SSD
- Optional DVD
- Up to 4 PCIe boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

Technical Specifications

System

Processor	Intel® Xeon® E-2200/2100, 8th/9th Gen. Intel® Core™ i3 – single socket H4 (LGA 1151)
Memory	Up to 128GB ECC UDIMM, DDR4-2600MHz
Chipset	Intel® C246
Network	2 x RJ45 Gigabit Ethernet 1 x RJ45 dedicata IPMI
Storage	2.5" SATA Disk - RAID 0, 1, 5, 10
SATA	6 SATA3 ports (6Gbps); RAID 0, 1, 5, 10
TPM	1 TPM Header
Motherboard I/O	Available at the front: 1 x VGA, 2 x USB 2.0, 2 x USB 3.1, 1 x COM, 2 x LAN, 1 x IPMI
Expansion slots	2x PCIe - Bracket Full Height 1x PCIe - Low Profile
Operative Systems	Windows® Server 2012 R2; Windows® Server 2016; Windows® Server 2019; Ubuntu 18.04 LTS; CentOS 7.5; Windows® 10 64bit
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 510 mm
Construction	Aluminum with surface passivation treatment
Colour	Silver / RAL9007
Mounting	2U 19" rackmount chassis Optional telescopic slides
Configuration	Front I/O and Rear Power Supply
Front Panel	Led Power ON and HDD/SSD functionality; Power ON / OFF and System Reset
Drive Bay	1 x slim 5.25"; 1 x 3.5" bay + 1 x internal bay x 3 ODD 2.5"

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.