

# GAP-145F-SOLO - G6 Series

## 1U RUGGED SERVER



Intel® Xeon® Scalable Processors - Single socket  
Front I/O - Rear Power Supply



**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 operating in critical environments.

GAP-145F-SOLO rugged servers feature single socket Intel® Xeon® Scalable Processors (Skylake-SP / Cascade Lake-SP) supporting up to 28 cores and 56 thread, up to 38.5 MB cache, Intel® Ultra Path Interconnect, Intel® AVX-512, up to six memory channels and up to 48 PCIe 3.0 lanes. The integrated IPMI services support monitoring, control, and management functions sending alarm notifications in case of critical events.

GAP-145F-SOLO servers are designed for 19" rackmounting and have 1U chassis with 450mm depth.

The front I/O and rear power supply layout includes three removable SSD, up to three internal SSD and a slim DVD.

GAP-145F-SOLO rugged servers can host up to two PCIe cards. In case additional boards are needed they can be provided with a dedicated fixing for optimal protection in case of shocks and vibrations also during transport.

GAP servers are designed to meet according to MIL-STD-810F for temperature and shocks, MIL-STD-167-1A for vibrations and can optionally conform to MIL-STD-461 for EMI/EMC.

Upon request the I/O connectors and the power supply input can be provided with MIL-GRADE connectors.

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

- 1U Rugged Server - 450mm depth
- Single Processor
- Intel® Xeon® Scalable Processors
- 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
- Up to 2 PCIe boards
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

## Technical Specifications

### System

<b>Processor</b>	Intel® Xeon® Scalable Processors Family - single socket P (LGA 3647)
<b>Memory</b>	Up to 1,5TB 3DS ECC RDIMM, DDR4-2933/2666MHz 6 DIMM slots
<b>Chipset</b>	Intel® C622
<b>Network</b>	2 x RJ45 Gigabit Ethernet 1 x RJ45 dedicated IPMI
<b>Storage</b>	2.5" SATA Disk - 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 3.0, 2 x USB 2.0, 2 x GbE, 1 x IPMI, 1 x COM
<b>Expansion slots</b>	2 x PCIe - Bracket Full Height 2x PCI-Express 3.0 x16 2 SuperDOM (Disk on Module) ports with built-in power 1x M.2 Interface: PCI-E 3.0 x4 and SATA - Form Factor: 2280, 22110 Key: M-Key Double Height Connector
<b>Operative Systems</b>	Windows® 8.1Enterprise, Windows® 10 IoT Enterprise 2016, Windows® Server 2012 R2; Windows® Server 2016; Windows® Server 2019; Linux®, VmWare®
<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 44,45 x 450 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 DVD; 1 x 3.5" bay + 3 x internal 2.5" ODD

### 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.