

HALF19® RUGGED MICRO SERVER H19-235

expando



2U
Platform

1
CPU

2
SFP +

4
Hot Swap SSD

HALF19
Rack Width

356 mm
Depth

HALF19® is a family 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.

H19-235 rugged microserver features a single socket Intel® Xeon® Processor, providing a balanced architecture with excellent performance at lower power consumption. It is designed to handle demanding workloads with support for up to 128GB DDR4 RAM memory, offering enhanced data integrity and reliability. The integrated IPMI services enable monitoring, control, and management functions.

H19-235 is built with a 2U compact modular chassis, measuring 356mm in depth, and includes front brackets. Its design allows two units to be paired with a retention kit for accommodation into a standard 19" rack.

The rugged microserver provides a front I/O layout and rear power supply layout. The front panel includes up to four removable SSD 7.68TB SATA 6Gb/s TLC in RAID 5.

H19-235 rugged servers are designed to meet MIL-STD-810G standards for temperature and shocks, as well as MIL-STD-167-1A for vibrations. Optional configurations can meet MIL-STD-461 standards for EMI/EMC, ensuring robust performance in extreme conditions. The I/O connectors and power supply input are customizable with MIL-GRADE connectors.

H19-235 server configurations can also undergo specific thermal or mechanical environmental stress tests upon request, ensuring the unit's resilience and reliability in mission-critical applications.

FEATURES

- Intel® Xeon® Processor D-1718T, 4C, 46W
- 2U Half19" Rugged Server - 356 mm depth
- Single Socket Motherboard
- 4 x 2.5" SATA SSD in front removable bays
- Front I/O connectors and rear Power Input
- Single DC Power Supply
- 2 x RAM 32GB ECC DDR4 2666MHz
- 2 x SFP+ 10GbE
- TPM 2.0
- Removable fan
- Optional Conformal Coating
- MIL-STD-810G
- Optional MIL-STD-461

HALF19 ® RUGGED MICRO SERVER

H19-235

TECHNICAL SPECIFICATIONS

SYSTEM

CPU	Intel® Xeon® quad-core Processor D-1718T, 10MB Cache, Single Socket FCBGA-2227 supported, CPU TDP supports up to 46W TDP
Memory	2 x DDR4 ECC, 32GB (64GB tot)
Chipset	System on chip
Graphics	ASPEED AST2600 BMC with Graphics
Network Connectivity	2 x SFP28 25 Gigabit Ethernet LAN ports and 2 x RJ45 10GBase-T ports
Storage	4 x SSD 7.68TB SATA 6Gb/s TLC in front removable bays SoC controller for 4 SATA (6Gb/s) ports RAID 0, 1, 5, 10
TPM	TPM 2.0
Motherboard	X12SDV-4C-SPT4F Supermicro Single Socket Motherboard with Embedded Xeon D System on Chip (SoC)
Expansion slots	1 PCIe 4.0 x8, 1 PCIe 3.0 x4 (or 4x SATA), via Oculink, M.2 Interface: 1 SATA/PCIe 4.0 x4, Form Factor: 2280, Key: M-Key
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	DC Single Power Supply 28V (20V-36V)
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MECHANICAL

Dimensions	249 (213mm body) x 88 x 356 mm (W x H x D)
Material	Aluminum with surface passivation treatment
Colour	NATO Green / RAL 6031 - Powder Coating
Mounting	2U Half of a 19" rackmount chassis, Optional Telescopic slides, Retention kit to pair two units in a 19" rackmount space included
Configuration	Front I/O - Rear Power Supply
Front Panel Leds / Buttons	Power On/Off button with LED
Drive Bays	2x 3.5" Floppy drive bay
Fans	1x removable PWM fan

ENVIRONMENTAL

Operating Temperature	Standard: 0 C / +50 C Extended: -20 C / +60 C (depending on the configurations)
Operating Humidity	5% to 95% non-condensed at 60°C - 48h duration (depending on the configurations)
Storage Temperature	-40C / +70 C (depending on the configurations)
Vibrations	MIL-STD-167-1A
Vibrations not Operating	MIL-STD-810H
Operating Shock	MIL-STD-810G
Certifications	Directive 2014/35/UE-LVD / Directive 2014/30/UE-EMC Directive 2011/65/UE - RoHS / Regulation (EC) No 1907/2006 - REACH

HALF19 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.