SES-120

High-Performance Secure Encrypted Server

Features

- Ensure top-tier security with Viasat's DARC-ssd® 600 drives

- Effortlessly transfer data with removable, high-reliability NVMe drives

- Streamline classified information handling during storage and transportation

- Uninterrupted operations with removable dual-supply power redundancy and thermally engineered cooling

- Powerful processing with a range of 14th Gen Intel® Core™ processors

Overview

Captec's SES range is a family of highly secure servers incorporating NCSC CAPS evaluated technology to safeguard official, secret and top secret information. Featuring military-grade AES-256 hardware encryption and a tamper-evident design, with front panel removable and lockable high reliability NVMe SSD drives, unlocked as a single drive set. Available in compact 2U form factor with a wide range of communications and I/O connectivity and options of processing power, storage, power supply and pre-loaded OS.

Engineered with bespoke forced-air cooling to minimise throttling during heavy workloads. Optional ruggedisation up to MIL Standard for deployment in demanding environments.

Specifications

SES-120	A typical configuration could consist of:
CPU	**Commercial:** Intel® i9-14900K, 24 Cores, 3.2/6.0 GHz **Embedded:** Intel® i9-14900, 24 Cores, 2.0/5.8 GHz Intel® i7-14700, 20 Cores, 2.1/5.4 GHz Intel® i5-14500, 14 Cores, 2.6/5.0 GHz *Clock Speed based on Performance Cores
Chipset	Intel® Z690
Memory	Up to 128GB DDR4, non-ECC RAM
Storage	Viasat DARC-ssd® 600 (AES-256 Encryption) 256GB, 512GB or 1TB 256GB ~ 8TB (Non-Encrypted)
Disks	1 to 4 x M.2 (2280) NVMe

SES-120	Continued:
Rear I/O	2 x 10Gb LAN, Intel® X710 2 x 1Gb LAN, Intel® i210 2 x USB 3.2 (Gen1) – Type A 1 x IPMI 2.0 Remote Management (RJ45) 1 x COM (DB9) 3 x Video (1 x VGA, 1 x HDMI, 1 x Display Port)
Expansion	3 Slots: 1 x PCIe4.0 x16, 1 x PCIe4.0 x8 1 x PCIe3.0 x1
Optional I/O	Fibre LAN up to 100Gb Wide range of GPUs from NVIDIA, AMD & Intel® Integration of customer proprietary PCI-E cards
Graphics	Onboard Intel® UHD Graphics 770. Additional discrete graphics card options available
Front I/O	2 x USB 3.0 Type A ports (for use with Viasat Keystone Token)

SES-120	Continued:
Operating System	**Microsoft® Windows:** -Windows® 10 (64-bit) -Windows® 11 (64-bit) **Linux:** -RedHat Enterprise Linux Server 8.5 (64-bit) / 7.9 (64-bit) - CentOs 8.5 (64-bit) / 7.9 (64-bit) - SUSE SLES 15.2 (64-bit) / 12.5 (64-bit) - UBuntu 21.10 (64-bit) / 21.04 (64-bit) / 20.04.4 (64-bit) **Hypervisor:** -VMWare® ESXi 7.0 U3d* -VMWare® ESXi 6.7.0 U3 *Please contact our sales teams to discuss your project requirements.

Additional Options

Ruggedised variants of the server up to MIL-STD are available, with variations such as a wider operating temperature range, shock and vibration resilience, enhanced EMC performance, bespoke military connectors, and conformal coating.

SES-120	Continued:
DVD	Custom build option on request
Dimensions	483W x 88H x 510D (mm)
PSU	High reliability single, or dual redundant power supplies: 110 ~ 264V AC 18 ~ 36V DC
Form Factor	2U,19" Rackmount Design (1U Variant available)
Weight	Approx 12.5Kg, depending on configuration
Construction	Heavy duty cold rolled electroplated steel
Operating Temperature	0°C ~ +40°C
Storage Temperature	-40°C ~ +70°C
Certification	CE, RoHS, REACH

Viasat DARC-ssd® 600 Specifications

▼ **NCSC CAPS EVALUATED TO PROTECT SECRET AND TOP SECRET INFORMATION**

- Reduces handling requirements during storage and or transportation of Classified data

when the protected computer is turned off, and the user token device is carried separately

▼ **FULL DRIVE ENCRYPTION**

- Including all data and OS

- Secured upon system power down and hibernation

▼ **AES-256 HARDWARE ENCRYPTION**

- Authentication is performed by hardware and not in the system software layer

- Every drive sector is encrypted

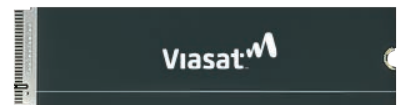- Emergency key purge available

▼ **SOLID STATE DRIVE (SSD)**

- No moving parts

- Provides performance and durability

- No noise – no spin or seek time, silent operation

▼ **TAMPER EVIDENT DESIGN**

- All devices are covered in conformal coating

▼ **ANTI-CLONE**

- DARC-ssd® 600 cannot be cloned once encryption is set

- Token is protected against cloning

CAPTEC | **Delivering end-to-end, like no one else.**
Bring us your challenge & experience the difference.

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