

SES-110

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
- Maintain uninterrupted operations with removable dual-supply power redundancy and thermally engineered cooling
- Powerful processing with a range of 14th-Gen Intel® Core™ processors

High-Performance Secure Encrypted Server



Overview

Captec's SES range is a family of highly secure servers incorporating NCSC CAPS-evaluated technology, which is also certified to UK Top Secret and NATO Cosmic Top Secret classifications. Featuring defense-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 a compact 1U form factor with a wide range of communications and I/O connectivity, and options for processing power, storage, power supply, and pre-loaded OS.

Engineered with custom forced-air cooling to minimize throttling during heavy workloads. Optional ruggedization up to MIL Standard for deployment in demanding environments.

Specifications

SES-110		A typical configuration could consist of:	SES-110	Continued:
CPU		Commercial: Intel® i5-14600K, 14 Cores, 3.5/5.3 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	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)
Chipset		Intel® Z690	Expansion	1 Slot: 1 x PCIe4.0 x16
Memory		Up to 128GB DDR4, non-ECC RAM	Optional I/O	Fiber LAN up to 100Gb Wide range of GPUs from NVIDIA, AMD & Intel® Integration of customer proprietary PCI-E cards
Storage		Viasat DARC-ssd® 600 (AES-256 Encryption) 256GB, 512GB or 1TB 256GB ~ 8TB (Non-Encrypted)	Graphics	Onboard Intel® UHD Graphics 770. Additional discrete graphics card options available
Disks		1 to 4 x M.2 (2280) NVMe	Front I/O	2 x USB 3.0 Type A ports (for use with Viasat Keystone Token)

SES-110	Continued:	SES-110	Continued:
Operating System <ul style="list-style-type: none"> Microsoft® Windows: <ul style="list-style-type: none"> -Windows® 10 (64-bit) -Windows® 11 (64-bit) Linux: <ul style="list-style-type: none"> -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: <ul style="list-style-type: none"> -VMWare® ESXi 7.0 U3d* -VMWare® ESXi 6.7.0 U3 <p>*Please contact our sales teams to discuss your project requirements.</p>		Dimensions 483W x 44H x 522D (mm)	PSU High reliability single, or dual redundant power supplies: 110 ~ 264V AC 18 ~ 36V DC

Additional Options

Ruggedized 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, custom defense connectors, and conformal coating.



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

CLASSIFICATION STATUS

Maintains NATO Cosmic Top Secret compliance when powered on, and reverts to NATO Unclassified when powered off, allowing drives to be transported or handled without special security measures.

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

