KORTEX™/V

Delivering the fastest decision-making capabilities at the tactical edge requires computing designed for the job. Kortex V is a rugged, highly flexible system that provides cloud-scale computing and storage for remote and austere environments.

Powered by the latest Intel Xeon-D processors (formerly Ice Lake), Kortex V delivers an open and secure architecture that supports the deployment of different cloud and software vendor stacks at the edge. Furthermore, Kortex V leverages the Voyager 8 Quad Power (QP) chassis, delivering 1000 W power to eight individually battery backed Voyager modules. Kortex V delivers highly reliable and available compute operations for disconnected, limited, or intermittently connected (incl. power) environments as a single chassis deployment.

Kortex V is the only TrueTactical™ system that simplifies the delivery of compute to power private clouds in highly distributed locations. It performs without compromise when it matters most, even in the most austere environments of the tactical edge.

KEY FEATURES

- Up to 7 x VoyagerVM 4.0 modules (70 CPU cores, 896 GB RAM) with scalable, removable storage (up to 14 x E1.s NVMe SSDs and 7 x VIK+)
- Multiple configurations possible, including additional NVMe storage and GPU capabilities via expansion modules (attached through VoyagerVM 4.0's high-speed PCIe Gen 4 expansion interface)
- 10 Gbps core switch, Common Criteria certified, 121 Gbps backplane line-speed processing
- Modules designed rugged to operate to the highest level of shock, vibration, and temperature

- Individual battery backup power per compute and networking module
- Multi-enclave carbon fiber chassis with isolated power quadrants
- Modularity to easily right-size compute and storage for any mission need

SECURE   **COMPACT**   **RUGGED**

KLAS

KORTEX™ V

Specifications

PHYSICAL SPECIFICATIONS

- 22.5" W x 14.2" H x 10.1" H (571 x 360 x 257mm)
- Approx. 75 lbs / 34 kg based on module buildout. Batteries included.

CHASSIS SPECIFICATIONS

Power input:
- 90 - 264 VAC via four separate IEC inlets
- 20 VDC - 33 VDC (25 Amps max) via four DC inputs

Power output:
- 250 W per power quadrant (1000 W total)

TEMPERATURE

- Operating: -32 ºC to +50 ºC
- Storage: -40 ºC to +85 ºC

COMPLIANCE

Designed to meet:
- MIL-STD-810
- MIL-STD-461
- FCC Part 15 B
- CE
- RoHS
- REACH

COMPONENTS

Voyager 8 QP Chassis

- Eight Voyager module slots
- Carbon fiber monocoque case
- IP67 certified
- Pressure equalization valve

VoyagerVM 4.0

- Intel® Xeon® D-1746TER (10 cores)
- 128 GB RAM
- 4 x NVMe-based SSDs
  - 3 x removable self-encrypting drives
  - Fixed 256 GB storage device (optional)
- 100 Gbps aggregate network throughput
  - 4 x SFP28 (25GbE)
  - 2 x 2.5Gbps RJ45 Ethernet ports
  - 1 x RJ45 Ethernet port for management
- 9 – 36 VDC (120 W)

Voyager 1+

- Rugged lithium-ion rechargeable battery module
- 65 Wh of battery backup power
- 150 W power output

VoyagerSW12GG (Optional)

- Common Criteria certified 10 Gbps switch
- 121 Gbps backplane for line-speed processing on all ports simultaneously
- 40 Gbps trunk for interconnection with 3rd party switches
- Inter-VLAN routing in hardware at line rate
- 1 x 40 Gbps QSFP+ port for high-speed uplink. Can also operate as 4 x 10 Gbps SFP+ ports using included breakout cable
- Port mirroring, IPFix
- Ansible playbook management support
- Voyager Ignition Key (VIK) for configuration and storage
- KlasOS Fastnet management and configuration software

VoyagerSW10GG (Optional)

- 10 x 10 GbE bandwidth to process large data volumes
- Cisco IOS® XE switching and security
- Traffic prioritization of mission-critical data flows
- VIK support
- Built TrueTactical™ for reliable operation in extreme temperatures, shock, and vibration
- Scalable with simplicity and unified management using Cisco DNA Center

Kortex V Front With Expansion Modules Included

Kortex V Rear

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