



Voyager TDC

Tactical Data Centre

Deploying data-center sized servers and storage to remote areas has always been challenging logistically from the perspective of size, weight and power.

Since the launch of Voyager TDC, it's possible to deploy data-center grade compute and storage using commercial aircraft.

VMware vSAN and Nutanix Certified



Portable



Rugged



Low Power

COMMUNICATE MORE, CARRY LESS

KLAS

Specifications

System Components

- Voyager 8 transit case with integrated chassis/UPS
- Voyager TDC Sled
- 4 x Voyager TDC Blade
- Voyager TDC Switch

Physical Specifications

- 22" W x 14" D x 9" H (559 mm x 356 mm x 229 mm)
- 56.6 lb / 25.7 kg (without batteries)
- 63 lb / 28.5 kg (with standard BB-2590 batteries. Lower capacity BB-2590 batteries available for IATA compliance)

Construction

- Aerospace-grade, carbon fiber monocoque built from single mold structure for maximum strength
- O-ring seal around front and rear lids
- Grab handles on top and bottom of case
- Retractable extension handle
- Lightweight aluminum chassis with integrated PSU

Rackmountable Chassis

- Voyager 8 chassis may be removed from case for rackmount installations in vehicles in a 5U 19-inch rack
- 15.9 lb / 7.2 kg (without batteries)

Electrical Input Specifications

- 21-34 VDC (38 Amp maximum)
- 90-264 VAC (< 10 Amp at 100 VAC)
- Max input current of 10 Amp allowed for NEMA Sockets and Voyager 8 Plus

Electrical Output Specifications

- 10-36 VDC input up to 400 W with MIL-STD 1275D filter
- 90-264 VAC input up to 600 W, 50-400Hz
- Conditioned power provided to Voyager TDC 2.0 Blades, Sled and Switch

- 2 x AC outputs available at rear when AC input is present
- 2 x 12 VDC outputs at rear
- Uninterrupted failover between AC, DC and battery
- Space for 2 x BB-2590 batteries (available separately in high capacity for extended operation or lower capacity to comply with IATA regulations)
- Provides 414 Wh energy of backup

Voyager TDC Blades (4 Per System)

- Xeon D-1541 Processor
 - 8 cores, 16 threads
 - 2.1 GHz clock with turbo to 2.7 GHz
 - 12 MB cache
 - 128 GB 2.4 GHz DDR4 (512 GB per Voyager TDC system)
- Xeon D-1557 Processor
 - 12 cores, 24 threads
 - 1.5 GHz clock with turbo to 2.1 GHz
 - 18 MB cache
 - 128 GB 2.4 GHz DDR4 (512 GB per Voyager TDC system)

Storage

- Two storage caddies each supporting 1 or 2 SATA SSDs in 2.5" format
- 2.5" SSD capacities validated: 1.92 TB, 3.84 TB & 7.86 TB
- NVMe M.2 PCI Express card slot:
- Supports 110 mm enterprise-grade NVMe, including Samsung PM963/983 960 GB/1.92 TB
- Suitable for write cache or boot device
- Voyager Ignition Key (VIK) removable storage for hypervisor (4 GB to 32 GB)

Networking

- 2 x 10 Gbps Ethernet interfaces
- 2 x 1 Gbps Ethernet interfaces
- 1 x 1 Gbps Ethernet management interface

Various

- 2 x USB 3.0 interfaces
- RJ-45 console port
- VGA graphics support
- Web-based IPMI for remote management

Mechanical

- 7.4" W x 7.6" D x 2.4" H (188 mm x 194 mm x 61 mm)
- 4.41 lb / 2 kg each

Voyager TDC Switch

- 12 x 10 Gb switch ports, 4 of which are available as copper or fiber using SFP+
- Copper standards supported: 1GBASE-T, 2.5GBASE-T, 5GBASE-T and 10GBASE-T
- 1 Gb management port
- Voyager Ignition Key (VIK) removable configuration and storage
- Cisco-like UI based on KlasOS
- 121 Gbps switching backplane
- Layer 2 features include VLAN trunking, Port Security
- 802.3ad Link Aggregation

Compliance

- 506, 507, 510, 514, 516 and 521
- FCC Part 15B
- CE compliant
- IP67 rated with lids on

Key Features

- Voyager 8 case and chassis with built-in UPS and AC/DC charge options
- 4x TDC Blades each with
- Xeon D CPU with 128GB RAM
- NVMe storage for caching
- 4x 2.5" SATA SSDs
- VIK for each configuration changes
- Voyager TDC Switch with
- 12x 10Gbits/s port with copper and fiber options
- 121 Gbps backplane for line-speed processing on all ports simultaneously
- Inter-VLAN routing in hardware at line rate
- Port mirroring, IPFix
- 802.1AX/802.3ad
- Ansible playbook management supported

- Voyager Ignition Key (VIK) for configuration and storage
- VMWare vSAN certified
- Nutanix certified with both AOS and VMware ESXi

