



# Voyager ECK

VoyagerECK provides familiar and robust Cisco-based routing and switching capabilities while remaining scalable and compatible with other Voyager chassis options. It combines these networking capabilities with a lightweight carbon fiber chassis, integrated power supply with battery backup and a rugged yet compact SIP handset.

The innovative chassis design enables easy access to the handset for secure voice calls while keeping other networking components and HAIPF organized and concealed until needed.



Portable



Rugged



Low Power

COMMUNICATE MORE, CARRY LESS

**KLAS**



VoIP handset and power switch accessible through side door



Black-side door provides access to 5915 ESR ports and Wi-Fi/cellular dongle



KG-250X or KG-250XS and five additional red-side data ports accessible through red-side access door

## Voyager m-Series Modules

The VoyagerECK is based on Voyager m-Series modules so that it remains compatible with the rest of the Voyager baseband product line. Voyager products are designed to provide scalable network communications from a single user to a headquarters or command post installation using common modules wherever possible.

Prior to the introduction of Voyager m-Series modules, this sometimes meant that elements of a solution had more features and port density than required. Voyager m-Series modules allow increased customization of features in baseband packages without a corresponding increase in system size. These smaller modules also enable use of advanced Voyager networking capabilities on deployment platforms where larger Voyager modules are less practical.

Rather than designing a new form factor, Klas Telecom created modules that are half the height of the existing Voyager modules and designed them to slide in and out of the VoyagerECK. When removed from VoyagerECK, the Voyager m-Series modules can be combined for use with other chassis in the Voyager product range, such as Voyager 1, 2, 8 and VoyagerExpress.



VoyagerESm (red side) and VoyagerERm (black side) modules are removable from VoyagerECK chassis



VoyagerERm module based on Cisco 5915 ESR and Cradlepoint IBR600



VoyagerESm module based on Klas Layer 3 switch used in VoyagerESR



VoyagerERm and VoyagerESm can be combined to create a VoyagerESR module compatible with existing Voyager 1, 2, 8 & Express chassis



VoyagerESR



# Specifications

## Primary Components

- Cisco routing on black enclave supporting IOS 15.5
- Layer 3 switch on red enclave supporting 802.1x, IGMP, MSTP, SNMP, DHCP
- Support for GFE ViaSat KG-250X or KG-250XS HAIPE
- VoIP handset for red enclave
- Power supply and internal battery

## Black Enclave

- 1 x Cisco 5915 ESR
  - 2 Ethernet 10/100 switch ports (FE 0/3, FE 0/4). 1 PoE enabled port
  - 1 Ethernet 10/100 routed port for Ethernet uplink (FE 0/1)
  - 1 Ethernet 10/100 routed port for Wi-Fi/Cellular uplink (FE 0/1)
  - Internal connection to KG-250X (FE0/2)
  - 1 Console port
- Cradlepoint IBR600 3G/4G/Wi-Fi router
  - Fully Integrated Router/Bridge
  - Integrated 3G/4G modem
  - Certified for shock and vibration in accordance with MIL-STD-810G and SAE J1455
  - External 3G/4G and Wi-Fi Antennas
  - Ethernet Ports connected to Cisco 5915 ESR internally
  - (LAN/LAN or WAN/LAN)
  - WiFi 802.11 with Full Security
  - AT&T, Verizon, Sprint and International modem variants

## VoyagerECK Physical Specification

- 14.7" L x 8.9" W x 3.3" H (373 x 226 x 83mm)
- 9.2 lb / 4.1 kg (no KG-250X)
- 12 lb / 5.4 kg (with KG-250X)

## Certification and Approvals

- Approved to operate on DISA's DoD Enterprise Classified Travel Kit Gateway (DECTK-GW)
- Listed on the DISA UC APL and JITC approved
- MIL-STD-810G compliant
- CSfC compliant
- Red Dot Award for Product Design

# Key Features

- Easy access to VoSIP handset through dedicated door for voice calls even while on-the-move
- Data ports accessible through separate access doors
- Removal of Voyager Ignition Key (VIK) renders the device inoperable for additional security
- G.729 transcoding, NHRP, Multipoint GRE/DMVPN, OSPF
- VIK allows persona portability among systems and enables rapid reconfiguration by an incidental operator
- Carbon fiber structure provides lightweight but robust construction
- Half the size of Klas Telecom's Executive Voice Kit (EVK)

## Red Enclave

- 1 x KlasOS 5 Layer 3 Switch with ports:
  - 4 Ethernet 10/100 switch ports (FE 1/0 - 1/3). All PoE enabled
  - 1 Ethernet 10/100/1000 switch ports (Gb1)
  - 1 Ethernet 10/100/1000 switch port routed to KG-250X or KG-250XS (Gb0)
  - 1 FXS VoIP port
  - 2 USB 2.0 ports for connection to E&M or synchronous serial device
  - 1 USB 3.0 port
  - 1 Console port
  - 1 Voyager Ignition Key interface
  - G.729 transcoding, NHRP, Multipoint GRE/DMVPN, OSPF
- KlasOS 5 features:
  - STIG compliant Layer 2 switch
  - IEEE 802.1x Port-based Network Access Control
  - IEEE 802.1Q VLANs
  - Static & dynamic Port Security
  - Spanning Tree Protocol
  - SNMP v3
  - IGMP Snooping
  - Port mirroring
  - DHCP Server

## Electrical Specifications

- 10-36 VDC Input range
- Supports charging from automobile supply
- 2 hour internal battery power for all components
- PoE on red enclave to support a broad range of VoIP devices

## Temperature Range

- Operating temperature: -10 °C to 55 °C
- Storage temperature: -20 °C to 70 °C

