Voyager m-Series

Since its launch in 2012, Voyager has become the standard rugged, deployable communications solution for many US and partner nation special operations, traditional military, and first responder organizations. With a wide range of low SWaP, common form-factor network modules, including Cisco-based routing and switching, compute, cellular and radio integration, Voyager's scalability has proven ideal for supporting small to large team deployments using the various Voyager chassis options.

Measuring just half the height of a standard Voyager module, m-Series provides the same technology with lowered SWaP while remaining compatible with the standard Voyager form factor. The m-Series increases the flexibility and scalability of the Voyager system and users can better tailor its features to meet their requirements.

Communicate more, and carry even less with Voyager m-Series.

COMMUNICATE MORE, CARRY LESS

KLAS

Voyager m-Series Modules

Voyager ERm

VoyagerERm Router Module
- Embedded Cisco 5915 ESR
- Full Cisco IOS support including routing, VPN, Call Manager Express, DLEP radio integration & WAAS Express WAN Acceleration
- Options:
  - VoyagerERm-CP1: Cradlepoint IBR600NM wireless module with Wi-Fi LAN/WAN, 3G/LTE cellular client
  - VoyagerERm-CP2: Cradlepoint IBR600P with two external modem antennas and two 2.4 GHz 802.11n Wi-Fi antennas with integrated 3G/4G modem
  - VoyagerERm-NW: No wireless module. A blanking plate is provided
  - VoyagerERm-WR: Persistent Systems Wave Relay mesh radio

Voyager ESm

VoyagerESm Switch Module
- Embedded Klas Layer 2 switch with additional Layer 3 functionality
- Port security, 802.1x, STP, IGMP, SNMP
- Voyager Ignition Key (VIK) functionality

Voyager VMm

VoyagerVMm Compute Module
- Intel Processor (i3 or i5 options)
- Supports Virtualization
- Platform for Riverbed WAN Acceleration, Twisted Pair WAVE, Cisco IPICS, Cisco 5921 Software Router

Voyager EMm

VoyagerEMm Radio over IP Module
- Four RJ-45 radio ports supporting Press to Talk (PTT) and Squelch (SQL) functions
- Lightweight aluminum construction
- Two Ethernet ports on the front panel and one on the rear panel
- Support for a handset/headset/speaker such as the H-250
- Toggle switch allows switching between radio 1 - 4 and adjusting the volume level

m-Series Key Features
- Half the height of standard Voyager modules at 7.4" wide x 5.7" deep x 1" high
- Low power consumption
- Cisco-based technology
- Lightweight extruded aluminum construction
- Data & power backplane to simplify cabling

Example Configurations

Red/Black Solution
- VoyagerERm black-core router providing connectivity over SATCOM but also commercial Wi-Fi & cellular
- Sled to power HAIPE encryption device. Supports KG-250X, KIV-54 or KG-175D (mounted separately)
- VoyagerESm on high-side including VIK functionality

Enclave with WAN Acceleration
- VoyagerVMm compute platform running Riverbed Virtual Steelhead
- VoyagerESm switch for user connection
- Enclave HAIPE device
- Optional Cisco 5921 routing on VoyagerVMm
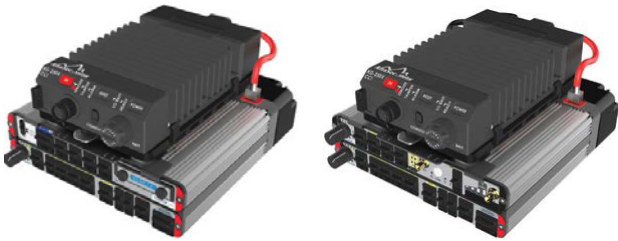
Two Enclaves with Colorless Core
- Simultaneous dual enclave with colorless core
- SATCOM, cellular, Wi-Fi transport options

VoyagerECK
- Executive communications solution with VoSIP and multi-enclave data capability in a small, portable package
- Built-in cellular and Wi-Fi transport options
- Inlcudes removable VoyagerERm and VoyagerESm modules

Compatibility

Specifications

Common (unless otherwise stated)
- Size: 7.4" W x 5.7" L x 1.0" H (188 mm x 145.2 mm x 26 mm)
- Operating Temperature: -25oC to +60oC
- Compliance: MIL-STD-810G, IEC 60529, MIL-STD-461E, FCC Part 15B
- Power: 10-18 VDC Input

VoyagerERm
- Weight: 1.8 lb / 0.8 kg
- Ports: 1 x RJ-45 Console, 4 x Fast Ethernet front ports, 1 x Fast Ethernet on the rear, 1 x USB
- Electrical: 48 VDC input for PoE; 15 W power consumption
- Router: Cisco 5915 ESR (FIPS 140-2 level 1)
- Management: Cisco IOS; SNMP v1, v2, v3
- Wi-Fi: 802.11n
- Cellular: 4G LTE, 3G EVDO, WiMAX, HSPA+, LTE/HSPA+
- Optional modules available

VoyagerESm
- Weight: 1.8 lb / 0.8 kg
- Ports: 1 x RJ-45 Console, 4 x Fast Ethernet, 1 x Gigabit Ethernet front port, 1 x Gigabit Ethernet on the rear, 2 x USB, 1 x FXS, 1 x VIK
- Electrical: 48 VDC input for PoE; 15 W power consumption
- KRTv4 Switch: Auto-sensing 10/100 BaseT; Cisco Discovery Protocol VLAN; IEEE 802.1Q port VLAN; Multiple Spanning Tree Protocol; Voice & Data VLAN; IEEE 802.1x MAC authentication; Layer 3 features include G.729 transcoding, NHRP, Multipoint GRE/DMVPN, OSPF
- Removable Storage: Voyager Ignition Key (VIK)
- Management: KlasOS 5; SNMP v1, v2, v3

VoyagerVMm
- Weight: 2.2 lb / 1.0 kg
- Operating Temperature: -30oC to +50oC
- Ports: 1 x Console, 3 x Gigabit Ethernet front ports, 1 x Gigabit Ethernet on the rear, 2 x USB 3.0, 1 x DisplayPort++, 1 x VIK, 1 x SSD
- Electrical: 20 W power consumption
- CPU Options:
  - 5th Gen Intel® Dual-Core™ i5-5350U (1.8GHz); 32 GB DDR3 RAM
  - 5th Gen Intel® Dual-Core™ i3-5010U (1.8GHz); 8 GB DDR3 RAM
  - Intel vPro / IPMI; Intel Virtualization Technology; IPMI management
- Storage Options:
  - Samsung 850 EVO 250 GB mSATA SSD
  - Samsung 1TB mSATA SSD option also available

VoyagerEMm
- Weight: 2.2 lb / 1.0 kg
- Ports: 2 x Ethernet RJ-45 on front, 1 x Ethernet Mill-Max on rear, 1 x Console RJ-45, Management port, 4 x E&M RJ-45 radio ports, 1 x H-250 Handset connector
- E&M: Frequency response selectable for 300 Hz to 3.4 KHz or Wideband 200 Hz to 20 KHz, Tx Audio, Rx Audio, Press to Talk (PTT), Squelch (SQL)

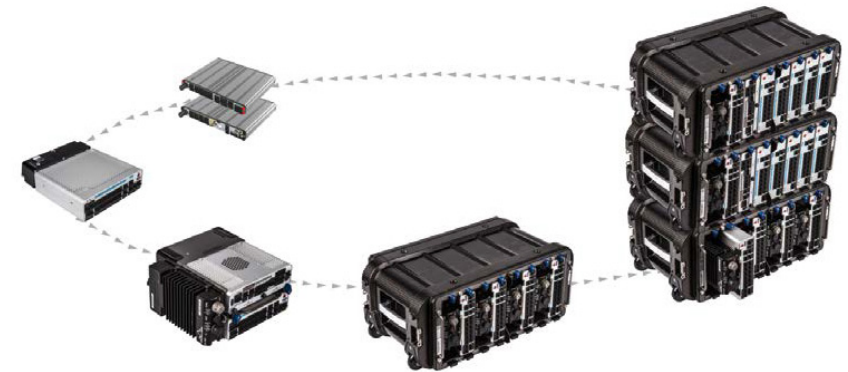VoyagerERm module based on Cisco 5915 ESR and Cradlepoint IBR600

VoyagerESm module based on Klas Layer 3 switch used in VoyagerESR

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

Voyager ESR

By maintaining compatibility with the standard Voyager form factor, m-Series modules can form the core of an increased capacity network system

Additional Components

- Voyager Personality Bracket (VoyagerPB): Mates two Voyager m-Series modules to make them compatible with a range of Voyager chassis.
- Two versions are available. One version couples the modules through the backplane, and the other exposes the modules' connectors for external use.

Quality ISO 9001