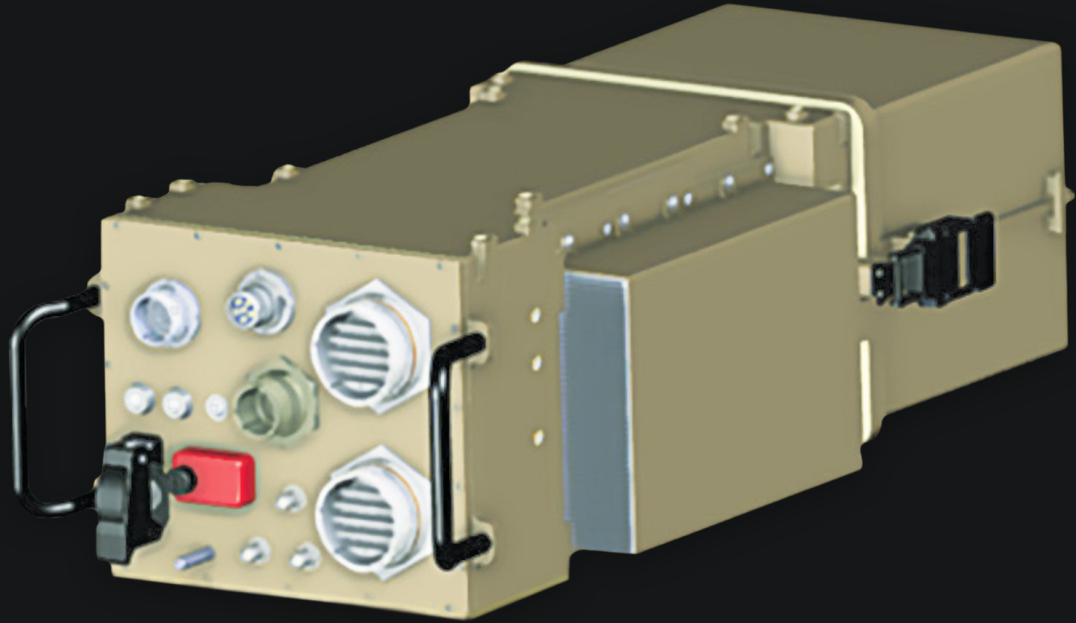


SharkCage ECCv3

2-SLOT 3U
OPENVPX SOSA-
ALIGNED CHASSIS



The AV SharkCage ECCv3 is an actively cooled, 2 payload slot SOSA-aligned chassis. This chassis represents the next generation of tactical chassis with embedded Network Switches, Power Supply, System/Chassis Management, 40G DP fat pipe, SATA/NFS Drive, M-Code GPS and "best in class" system clock phase noise and distribution. The chassis comes with both a rear battery pack assembly and a direct power rear panel to adapt to the deployment. The Sharkcage ECCv3 aligns with C5ISR/ EW Modular Open Suite of Standards (CMOSS)/Sensor Open Systems Architecture SOSA V1 & V2 (pending). Compliant 3U VPX cards (including AV's LANShark Compliant LANShark® and Bluefin radio solutions).

2-Slot 3U OpenVPX SOSA-Aligned Chassis

SHARKCAGE ECCV3

_Product Description

The chassis is environmentally sealed (IP67). Card cage rails are cooled by forced air from the fan(s) on either side of the enclosure to dissipate up to 160W (80W per slot) of payload power. Front panel connections include 1G-CP, 40G-DP, DS-101, multi-port RF connector (8 RF per slot), low latency GPIO and additional GPS and 1PPS. All chassis functions except the payload card are embedded within the chassis.

_Key Features

- > CMOSS/SOSA Chassis 2 x Payload, with embedded PNT, PSU, Switch SATA, and Chassis/System Manager
- > Active cooling for 80W per payload
- > Hot-swappable batteries, additional 'direct power' rear plate
- > Embedded PSU 400W
- > Embedded System/Chassis Manager (SHRMP)—MORA, VICTORY, RBAC, Firewall, SSD (NFS) Int and Ext, CP/DP network switches, IPMI, MP aggregation, GPIO aggregation
- > Silvus Comms Module - Dual RF (enabled)
- > Embedded PNT — M-Code (enabled), MAC, AltNav, Low Phase Clock Dist
- > 14-way 67.3C connector blocks

_Specifications

[CHASSIS AND BACKPLANE]

Two (2) 3U OpenVPX Payload Slots

SOSA-aligned payload profile: SLT3-PAY-1F1U1S1S1U1U2F1H-14.6.11-n

8 lane Expansion Plane, 25 Gbps per lane between slots 1 and 2

Front Panel LED Status Indicators, DS101, Zeroize Button

1 x MM/Teledyne 20 x RF (8 x slot, 1 x 100 Mhz in, 2 x 100 Mhz out, 1 x PPS out)

2 x Hercules I/O (I2C, MP, USB, WAN/CP, ML2B/DP, Timing, Payload GPIO)

[POWER SUPPLY]

400W Total Power Output (Chassis, Payloads and Headends)

Input power: 24 to 34VDC battery or 28V per MIL-STD-704F

Input Power routed to Headend (RAL) Power (200W max)

[MECHANICAL]

HEIGHT	5.5 in.
WIDTH	8.4 in. - fan plenum to plenum (widest point)
DEPTH	16.8 in. - front panel to battery cover (excluding connectors and handles)
WEIGHT	<19 lbs (including one battery, no payload)

[SYSTEM/CHASSIS MANAGER (SMRMP)]

1G-Control Plane, 40G/10G Data Plane

NXP1046A, 16GB DDR, 512GB SATA (int)

Up to 4TB Removable SSD (FIPS140-2)

MP Aggregation, I/O Aggregation

PolarFire Chassis Manager (46.11)

[POWER DISSIPATION]

80W per payloads slot (70C cold wall; 49C Ambient)

Variable Fan Control Active Cooling

[EMBEDDED PNT REFERENCE MODULE (JICD4.2 COMPLIANT)]

M-Code BAE MicroGRAM, Ublox GPS & Alt Nav capable

Miniature Atomic Clock (MAC)

Integrated ultra-low skew AUXCLK/REFCLK radial (Analog & LVDS)

External or Internal RefClk, AuxClk (1PPS)

[ENVIRONMENTAL]

VIBRATION MIL-STD 810G Method 516.6 Shock (1 thru IV)

TEMPERATURE 40 to 122 °F (-40 to +49 °C)

SUBMERSION (IP67) MIL-810G Method 512.5 (I, II)