

VIDEOSCOUT®-CM3

Rugged Communications Module Processing, Exploitation, Dissemination (PED) Management System

The VideoScout-Communications Module, 3rd Generation (VS-CM3) is an environmentally protected, semi-portable, remote video exploitation and management system designed for ground and maritime operations that provides the ability to control, receive, transmit, and process real-time video and metadata from ground and airborne surveillance platforms via a remotely mountable seven band antenna.

PRODUCT DESCRIPTION

VideoScout is a family of video PED management systems designed to capture, display, exploit, disseminate and manage critical video intelligence from a variety of manned and unmanned sensors. The VS-CM3 further expands the VideoScout family of systems by providing users with an environmentally protected, semi-portable, remote video exploitation management system designed for ground and maritime operations; it can be mounted atop ship masts, surveillance towers, rooftops, vehicles or any other desired platform. The VS-CM3 includes a secure L, S, C-Low and C-High band receiver and a UHF, L, S, C-Low, C-High, Ku-Low, and Ku-High band transceiver that supports any length of off-the-shelf coaxial antenna cable with a maximum insertion loss of up to 15 dB (approximately 100-500 feet, depending on cable type).

The VS-CM3 is the only system of its kind. It easily captures and leverages video and metadata from up to two Unmanned Aerial Systems (UAS), targeting pods, intelligence feeds and other common sensors, as well as video from co-located perimeter security cameras. Users can deploy multiple VS-CM3s in order to expand their field of coverage and control any number of systems via standard IP-based network protocol. This significantly expands traditional Line-of-Sight (LOS) coverage and provides the end user with enhanced Situational Awareness (SA) across the area of operation.

The VS-CM3 product is packaged with the VideoScout PED management software, VideoScout-Insyte®. With sufficient computer performance, this software enables users to capture 20+ simultaneous video feeds, each with their own 7-day Digital Video Recorder (DVR) buffer. It also supports data archiving along with immediate search, retrieval, exploitation and dissemination of captured video and/or associated imagery. VideoScout-Insyte is a Microsoft® Windows[™]-based application, which facilitates easy integration into existing C4ISR systems and intelligence networks. This ability to easily exploit, manage and disseminate data from multiple sources facilitates pre-mission planning, mission execution and post-mission analysis. Users can pause, zoom, DVR, step back and annotate video clips and images in near-real-time or on recorded video. VideoScout-Insyte records voice from the user and external radios to support mission planning, execution and postmission analysis. Video and metadata are also stored and indexed automatically for subsequent search and retrieval. Warfighters can create geological smart video by synchronizing metadata with video by using applications such as FalconView® maps or Google Earth™ from within VS-CM3 or via an Ethernet connection to Google Earth imagery.



Control, Receive, Transmit and Process Real-Time Video and Metadata

KEY FEATURES

- > Ruggedized, portable communications module
- Designed for ground and marine operations
- > Can be mounted atop ship masts, surveillance towers, rooftops, vehicles, or any other desired platform
- Includes a secure L, S, C-Low and C-High band receiver
- Includes a secure UHF, L, S, C-Low, C-High, Ku-Low and Ku-High band transceiver



SPECIFICATIONS

> External interfaces: AES key fill (DS-101), antenna (x2),

Ethernet (x2), Power Input,

RS-170A (x2)

> Size: 8" (w) x 10.5" (d) x 8.25" (h)

> Weight: <28 lbs (excluding antennas)

> Colors: Gray, tan, or green

> Power: 85-265 VAC, 9-36 VDC,

95 Watts maximum

> Video: H.264, H.265, MPEG-2, MPEG-4 Part

2, NTSC, PAL, RTSP

BANDS

> UHF: 400 to 470 MHz²

> L-Band: 1.65 to 1.85 GHz^{1,2}

> S-Band: 2.20 to 2.5 GHz¹,

2.025 to 2.50 GHz²

> C-Band: 4.40 to 5.0 GHz^{1,2}

5.25 to 5.85 GHz^{1,2}

> Ku-Band: 14.40 to 14.93 GHz,

15.15 to 15.35 GHz²

1. Receiver

2. Transceiver

ENVIRONMENTAL

> Altitude (storage): MIL-STD-810G, Method 500.5,

Proc I, 40,000 ft

> Altitude (operating): MIL-STD-810G, Method 500.5,

Proc II, 15,000 ft

> Temperature (storage): MIL-STD-810G, Method 501.5,

502.5, Proc I, -46 °C to +85 °C

> Temperature (operating): MIL-STD-810G, Method 501.5,

502.5, Proc II, -40 °C to +65 °C

> Temperature shock: MIL-STD-810G, Method 503.5,

Proc 1-C, -46 °C to +85 °C

> Rain: MIL-STD-810G, Method 506.5,

Proc I

> Humidity: MIL-STD-810G, Method 507.5,

Proc II

> Fungus: MIL-STD-810G, Method 508.6,

Annex B

> Salt Fog: MIL-STD-810G, Method 509.6

> Dust: MIL-STD-810G, Method 510.5,

Proc I

> Sand: MIL-STD-810G, Method 510.6,

Proc II

> Vibration (operating): MIL-STD-810G, Method 514.6,

Proc I, Cat 4

> Vibration (storage): MIL-STD-810G, Method 514.6,

Proc I, Cat 24

> Vibration (shipboard): MIL-STD-165-1A, Type 1

> Shock (functional): MIL-STD-810G, Method 516.6,

Proc I, 40g, 11ms

> Shock (transit drop): MIL-STD-810G, Method 516.6,

Proc IV

> Shock (shipboard): MIL-S-901E, Grade A, Class I, Type A

> Conducted emissions: MIL-STD-461G, CE101, CE102

> Conducted susceptibility: MIL-STD-461G, CS101, CS114,

CS115, CS116

> Electrostatic discharge: MIL-STD-461G, CS118

> Radiated emissions: MIL-STD-461G, RE102

> Radiated susceptibility: MIL-STD-461G, RS101, RS103

> Safety: IAW MIL-882 for system safety

RECEIVER

WAVEFORM		ANALOG	DDL (2, 6 MBPS)	TACTICAL (0.466, 1.6, 3.2, 6.4 MBPS)
	L	Rx	Rx	Rx
Frequency Band	S	Rx	Rx	Rx
. requestey zama	С	Rx	Rx	Rx
Encryption:			AES	AES

TRANSCEIVER

WAVEFORM ANALO		ANALOG	BE-CDL A MODES 1-8 (0.512-20 MBPS)	BE-CDL B MODES 101, 104 (0.2–44.736 MBPS)	CDL (0.2, 0.4, 2, 10.71A/B, 21.42, 44.73 MBPS)	DDL (2, 6 MBPS)	TACTICAL (0.466, 1.6, 3.2, 6.4 MBPS)
Frequency Band	UHF	Rx	Rx/Tx	Rx/Tx	Rx/Tx		Rx
	L	Rx	Rx/Tx	Rx/Tx	Rx/Tx	Rx	Rx
	s	Rx	Rx/Tx	Rx/Tx	Rx/Tx	Rx	Rx
	С	Rx	Rx/Tx	Rx/Tx	Rx/Tx	Rx	Rx
	Ku	Rx	Rx/Tx	Rx/Tx	Rx/Tx		Rx
Encryption:			AES, Type 1	AES, Type 1	AES, Type 1	AES	AES



