



# **High-Speed Ruggedized LVDS Video and Data Recording Device**

#### **Overview**

The DDC Video and Advanced Data Recorder (VAADR) records real-time video in ruggedized application, accommodating high frame-rate, 16-bit high-resolution imagery and/or data. Capture RAW or compressed imagery, as well as associated metadata. The RAW imagery recording and associated playback allows unprecedented advanced image analysis and processing during debriefing. The unit provides multiple channels, with mixed record/playback, a variety of conventional digital video controls, and a mix of very advanced image analysis and processing during playback. Additionally, it handles metadata acquisition, synchronization, management, and output to display.



Model: DDC-VAADR2-RWM-512-001

### **Features and Capabilities**

- Record LVDS cameras and data
- · Simultaneous recording and playback of multiple channels
- · No debriefing station required, only a PC or laptop
- High bandwidth extraction via **USB3.0**
- Record RAW or compressed data
- Ruggedized for military use
- · Optional chem-film
- Plug-and-play USB2.0 and USB3.0
- Instant access to video and data
- · View recorded video with thirdparty applications
- Optional VAADRView provides instant access to video to block out sensitive information and export video to various formats





#### **Front Panel**

#### **Back Panel**





### **Specifications**

Input Power	12V - 28V
Interfaces	USB 3.0 VAADRLink
Ports	4 RX pairs 4 TX pairs LVDS / HSTLII
Dimensions	6.5" x 4.7" x 1.4"
Operational Envelope	7.5g Envelope
Power	< 12 W at 12V
Mechanical Shock	Method 516.4, in Opposite Directions Along Each of Three Orthogonal Axes, with Waveform / Amplitude of Shock Impulse Characteristics:  Operating: ±20 G  All Shocks: Half Sine Pulses  All three axes: 11 milliseconds duration
Vibration	Method 514.5, Procedure 1

## **VAADR Example Record Times**

Video	RS-170		640x480 (16 bit, 30 fps)		720p (16 bit, 60 fps)		1024x1024 (16 bit, 30 fps)		1024x1024 (16 bit, 60 fps)		1080i (16 bit, 30 fps)		1080p (16 bit, 60 fps)		4K (16 bit, 30 fps)		4K (16 bit, 60 fps)	
	RAW	MPEG2	RAW	MPEG2	RAW	MPEG2	RAW	MPEG2	RAW	MPEG2	RAW	MPEG2	RAW	MPEG2	RAW	MPEG2	RAW	MPEG2
512 GB	16h	8.2d	8.2h	4.1d	1.3h	16h	2.4h	29h	1.2h	14.5h	1.2h	14.7h	36m	7.3h	17m	3.4h	8m	1.7h
1 TB	32h	16.1d	16h	8d	2.7h	32h	4.7h	2.3d	2.3h	28h	2.4h	28h	1.2h	14h	33m	6.7h	16m	3.3h
2 TB	2.6d	32.3d	32h	16.1d	5.3h	2.6d	9.4h	4.7d	4.7h	2.3d	4.7h	2.4d	2.4h	28h	1.1h	13h	33m	6.7h
4 TB	5.3d	64.7d	2.7d	32.3d	10h	5.3d	18h	9.4d	9.4h	4.7d	9.5h	4.8d	4.7h	2.3d	2.2h	26h	1.1h	13h

<sup>\*</sup>Table assumes a compression factor of 12. Larger compression factors of 25 or beyond are possible, but will affect video quality.



