LAND WARFARE SYSTEMS

DVE-CLL Driver's Vision Enhancer-Color Low Light

Understand first. Act first. Finish the mission decisively.

The DVE-Color Low Light (DVE-CLL), from Leonardo DRS, provides combat and tactical-wheeled vehicle operators with enhanced situational awareness by combining the expansive views of the DVE Wide with optimal EO/IR sensors. Overall, the DVE-CLL improves survivability and mission capability, allowing safe navigation through dust, sand, haze, smoke, light fog and the blackest night all while improving safety during Thermal Crossover.

The 'front-facing' DVE–CLL integrates three state-of-the art 640 x 480, 17-micron uncooled infrared sensors coupled with digital color low light, delivering a stitched video with of a 107° x 30° field of view (FOV).

The DVE–CLL can receive, manage, and display video from multiple external vehicle cameras. The driver can electronically pan through 107° of total horizontal fields of view, eliminating blind spots and allowing the driver to see both sides of the road. Vehicle wheel track indicators aid the driver in clearly identifying any potential impediments allowing operators to leverage color, ultra-sensitive low light, and near infrared imagers for additional spectral coverage.

The DVE-CLL is fully "backwards compatible" with all fielded DVE units, which means that any vehicle currently equipped with a DVE system can be readily upgraded. It is also forward compatible with new, high resolution, touchscreen displays.

LEONARDO DRS

OUR TECHNOLOGY

Leonardo DRS is a world class leader in EO/IR surveillance, situational awareness, and targeting systems for platforms that provide the warfighter the ability to overcome the complexities of the battlefield and improve lethality and survivability. For over fifty years, Leonard DRS has been an innovative developer and manufacturer of fully integrated EO/IR systems for the Department of Defense and our allies. Land, sea, air and space, Leonardo DRS is a trusted partner for complex and affordable technology solutions.

FEATURES

- Low Distortion Design
- Electronic high-definition distortion correction and stitching
- Athermalized
- Multispectral capability: IR and VIS-NIR Color Low Light

FOCAL PLANE ARRAY

Component	*Description*
Detector	Uncooled VOx Microbolometer
Array Size	640 x 480
Detector Pitch	17 µm
Spectral Response	8 – 14 µm
Color Low Light	CMOS, 1280 x 1024, 9.5 µm, 0.4 – 1.1 µm

VIDEO

Frame Rate	IR 30Hz, CLL: 60 Hz
Video Interface	ANSI/SMPTE 170M NTSC, 3G-SDI
Image Polarity	White Hot/Black Hot (IR Only)

ELECTRICAL

Voltage	14 – 40 VDC
Power	< 16 W

PHYSICAL

Dimensions (W x H x L)	8.8 x 5.7 x 3.7 in
Weight	< 8.0 lbs

COMMUNICATION INTERFACE

Component	*Description*
Serial Interface	RS – 232/ USB 2.0

OPTICS

IR Channel FOV	3 x 40° x 30° (electronically stitched, seamless 107° x 30° video)
IR Focal Length	15.5 mm, F1.1
IR Coating	Hard Carbon
Color Low Light FOV	65° HFOV x 50° VFOV
Color Focal Length	9.74 mm, F/1.3LensD

ENVIRONMENTAL

Operating Temperature	-37°C to +49°C plus solar load
Storage Temperature	-46°C to +71°C

ADDITIONAL

Part Number	1046949-10x

LeonardoDRS.com/DVE

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