



Based on the DRS High Density Vertically Integrated Photodiode (HDVIP) technology, this advanced High Operating Temperature Mercury Cadmium Telluride (MCT) sensor array delivers peerless sensitivity, uniformity, and sensor modulation transfer function (MTF) in a low SWaP package.

DETAILS

HexaBlu® stands out with proven reliability and low induced vibration of the cooler compressor system. The dewar cooler assembly has virtually undetectable displacement at the sensor cold stage, and is almost nearly inaudible while in operation. The sensor radiometric performance excels with a 3.5 Me well depth. The single integration time dynamic range for this small pitch sensor exceeds that of all comparable products.

This dewar has been proven to hold an extremely long life-cycle. Demanding tests and stressful loading conditions showed the cooler still operating after 27k hours (about 3 years of continuous operation). The core is optimized for both low SWaP applications such as airborne imaging as well as applications driven by long-life metrics such as security and surveillance applications.

- **APPLICATIONS**
- + Superior long-range imaging
- + Port, airport, border security
- + Around-the-clock monitoring
- + Security and surveillance
- + Manned, unmanned vehicles
- + CUAS Systems
- + Long-distance DRI
- + Custom Militarty Systems

- + 1280x960, 6-micron pixel pitch
- + Industry-leading long-life cooler
- + <30 millikelvin NETD
- + Low Swap: 295 grams
- + Developed by DRS EOIS







HEXABLU® 6 MICRON HD HOT MWIR CAMERA CORE BY DRS

EXPORT CLASSIFICATION: DUAL USE

FEATURE SPECS

DETECTOR

Detector Type	Mercury Cadmium Telluride (MCT)
Detector Construction	high density vertically integrated photodiode
Array Format	1280 x 960
Pixel Pitch	6 Micron
Spectral Response	MWIR (3.4-4 w/ CO2 filter)
Frame Rate	30/60 Hz user selectable
	up to 120Hz
Well Depth	4.8Me-
Quantum Efficiency	74%
NETD	<30 mK

ENVIRONMENTAL

Size (L x W x H)	68 x 61 x 46 mm
Weight	270g
Power dissipation	Processor: 2.5W typical Cooler: 2.5W typical steady state, 9W typical during cooldown
Operating temperature	-40°C to +71°C
Cool Down Time	3min. @23°C

SYSTEM

Digital Video Output	CameraLink® digital corrected video
NUC	2-point NUC, Bad pixel replacement
Command Interfaces	LVDS UART
Frame Synchronization	LVDS FSync
Input voltage	Processor: 5VDC Cooler: 12VDC



