LIVAR® M506
Gated SWIR Camera System

The LIVAR® M506 Gated SWIR Camera System is ideal for covert operations and target identification, supporting lasers from 1.0 - 1.6 µm. Cost-effective, compact and lightweight, this range-gated, two-dimensional imaging camera operates in the eye-safe Short Wave Infrared (SWIR) band, provides day and night coverage, and supports mounted and dismounted operations. The camera system includes the camera, High Voltage Power Supply (HVPS) and Thermoelectric Cooler Controller (TECC). **An optional high-PRF version is available that allows the use of low-power, high-PRF diode lasers with the camera in accumulation mode.**

Working in conjunction with a range detector, the LIVAR® M506 system sets the range gate for the target location to provide a stream of digital images optimized for that range. The camera can be set to active master, active slave, or passive imaging modes to accommodate a variety of applications.

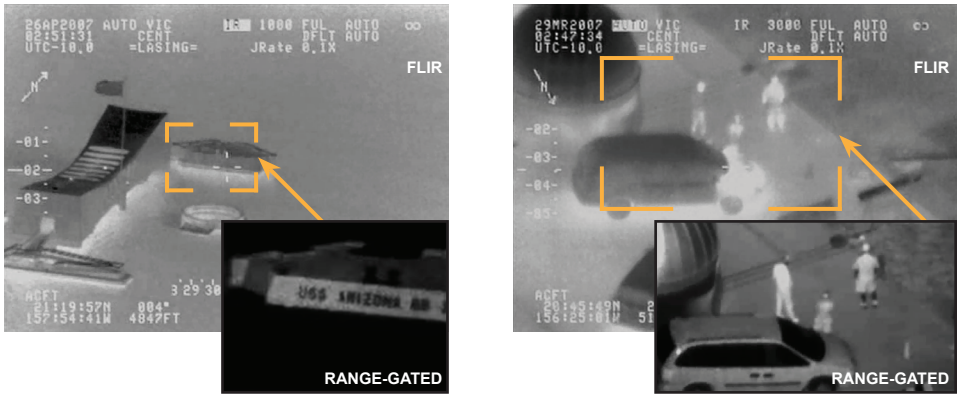
The LIVAR® M506 system offers system integrators an advanced long range surveillance camera at a low cost.

APPLICATIONS

- Airborne, ground and maritime
- Long range reconnaissance and surveillance

FEATURES / BENEFITS

- SWIR response from 0.95 - 1.65 nm supports multiple laser wavelengths
- Small, rugged sensor for demanding applications
- Photon shot noise limited due to electron bombarded gain
- Provides imagery for positive standoff combat identification
- Penetrates battlefield obscurants, haze, windshields, and windows
- Optional high-PRF version allows the use of low-power, high-PRF lasers



Range-Gated Imagery Compared to FLIR Imagery

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LIVAR® M506 SPECIFICATIONS

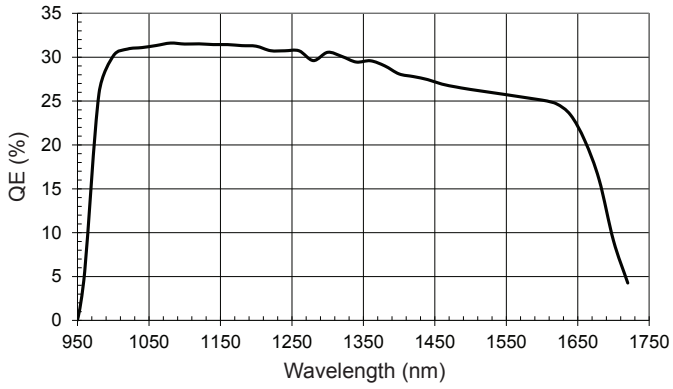
Sensor Photocathode	Transferred electron photocathode
Camera Resolution	640 x 512 pixels (8.576 mm x 6.861 mm imager)
Sensor Format	2/3 inch
Pixel Size	13.4 µm
Spectral Response	950 nm to 1650 nm
Quantum Efficiency (QE)	≥ 25% @ 1.55 µm
Limiting Resolution	≥ 28 lp/mm
Dark Current	≤ 100 nA/cm^2
Dynamic Range	≥ 48 dB
Percent Good Elements	≥ 99.8%
Frame Rate	≤ 30 fps at full camera image format. Image can be windowed for higher frame rates.
Video Output	CameraLink® Base
Control Interface	RS-232, RS-422 & LVDS
Selectable Camera Modes	Active Master, Active Slave, Passive Imaging
HVPS Gate	Minimum gate width ~ 70 ns, gate rise & fall time ~ 65 ns.
High-PRF Option	PRF up to 7,500 Hz with camera in accumulation mode. Contact factory for ordering information.
Input Voltage	Camera: 12 VDC, HVPS: 12 VDC, TECC: 6 VDC
Power Consumption	Camera: 3 W, HVPS: 1.2 W, TECC: 22.2 W
Size	Camera: 1.8” W x 2.6” H x 2.8” D, HVPS: 2.0” x 2.0” x 1.4”, TECC: 2.0” x 1.8” x 0.5”
Weight	Camera: 280 g, HVPS: 159 g, TECC 118 g
Operating Temperature	-40°C to +70°C, TECC required above +20°C. Contact factory for specific TECC set points.
Storage Temperature	-51°C to +71°C
Operating Altitude	≤ 15,000 ft
Operating Shock	20 g’s peak value, 11 ms duration, 3 axes
Operating Vibration	0.040 g^2/Hz from 5 to 2,000 Hz
Included Software	Graphical User Interface (GUI) with ability to set camera mode

NOTE: This product is under the export control of the Office of Defense Trade Controls, U.S. Department of State, and is subject to the International Traffic in Arms Regulations.Transshipment to any destination outside of the United States without the knowledge and consent of the Office of Defense Trade Controls is strictly prohibited.

ORDERING INFORMATION

LIVAR® M506 Camera	Contact Factory
LIVAR® HVPS	446531
LIVAR® TECC	Contact Factory
LIVAR® Accessory Kit (includes accessories below)	446323
LIVAR® Cable, Power-Serial	446923
LIVAR® Cable, TECC	660801
LIVAR® HV Cable (Qty 2)	1-001033
CameraLink® Cable Adapter	446910
CameraLink® MDR Cable	1-000711

Quantum Efficiency (Typical)



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