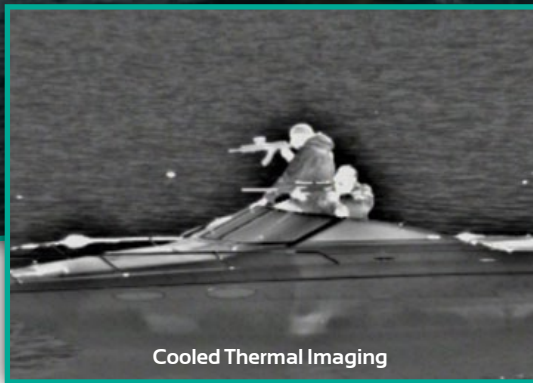


night navigator™ 3000



Cooled Thermal Imaging



12.5x Continuous Optical Zoom

Long-Range Thermal Imaging

The Night Navigator™ 3000 series come equipped with a Long-Range Cooled Thermal Imager and High-Definition Day Camera. This unit provides superior long-range detection and resolution (640x512) for a variety of targets and applications. A Thermal-only system that removes the HD Day Camera is optionally available.

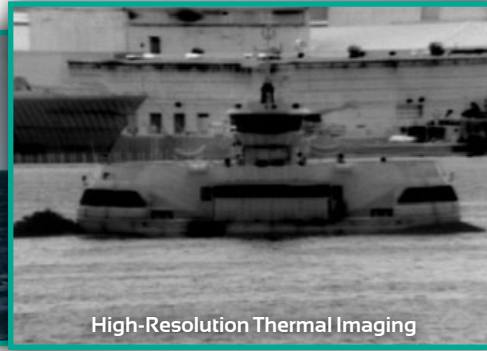
Applications:

- Patrol vessels
- Early detection of potential security threats
- SAR operations
- Coast Guard
- Long-range surveillance: illegal immigration, smuggling, fisheries

Main Features

- **Long-Range Cooled Thermal Imager**
 - 640x512 pixel resolution
 - 25° to 2° field of view
 - 12.5x continuous optical zoom
 - 12x digital zoom
- **High-Definition Day Camera**
 - 1080i or 720p selectable
 - 10x optical continuous zoom
 - 12x digital continuous zoom
- **3-Axis Gyro Stabilization**
 - Resolved through 2-axis positioning
- **Multiple Control Options**
 - Panel mount hardware controller
 - IP controllable

night navigator™ 3000



High-Resolution, Long-Range Cooled Thermal Imager

Field of View	25° - 2°
Detector Type:	InSb Focal Plane Array
Pixel Resolution:	640 x 512
Detector Pitch:	≤ 15 μm
NETD:	≤ 20 mK
Optical Zoom:	12.5x continuous
Digital Zoom:	12x
Focal Length:	22 to 275 mm
Focus Control:	Auto, manual
Spectral Range:	3 - 5 μm
Frame Rate:	25-30 Hz
Color Palettes:	7
Window coating:	Hard Carbon protective coating
MTBF:	20,000 hours

High-Definition Color Day Camera

Sensor Type:	CMOS
HD & SD Formats:	1080i/720p HD selectable
Field of View:	50° to 5.4°
Optical/Digital Zoom:	10x/12x continuous
Focus:	Auto & Manual
Window Coating:	Hydrophobic

Video Display and Signal

NTSC (RS170) or PAL (CCIR) format:	Must be specified at time of order
On-Screen Information Display:	Data, Position, Heading, Speed over Ground, Reticle, & Camera Functions

Payload Platform Specifications

Configuration:	Dome up
Width:	41.1 cm (16.2 in)
Height (above mounting surface):	42.9 cm (16.9 in)
Weight:	~40 kg (88 lbs)
Tilt Range:	-30° to +90°
Pan Range:	360° Continuous
Operating Temperature Range:	-20°C to +50°C
Voltage:	20 to 34VDC
Maximum Angular Velocity:	40°/second
3-Axis Gyro stabilization:	Resolved through 2-axis positioning
Line of Sight Stabilization:	1°
Stabilization Accuracy:	13 mrad
Ingress Protection	IP65
Weatherized Pan & Tilt Unit Sealed for the Marine Environment	

Panel-Mount Controller

Radar Cursor & ARPA Target Slaving:	Protocol: NMEA0183 (RS422/RS232)
Integrated graphical information display:	Position, Heading & Camera Functions
Dimensions (W x H):	16.7 x 23.6 cm (6.6 x 9.3 in)
TCP/IP control with Night Navigator or Customer Supplied Graphical User Interface (GUI)	

Options

Cold Weather Package	Allows system to operate at -40°C
IP Network Controllable	Network control of Night Navigator
Video Tracking Module	Allows for the selection/tracking of objects and electronic stabilization (in addition to gyro stabilization)

