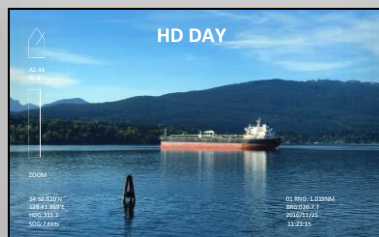
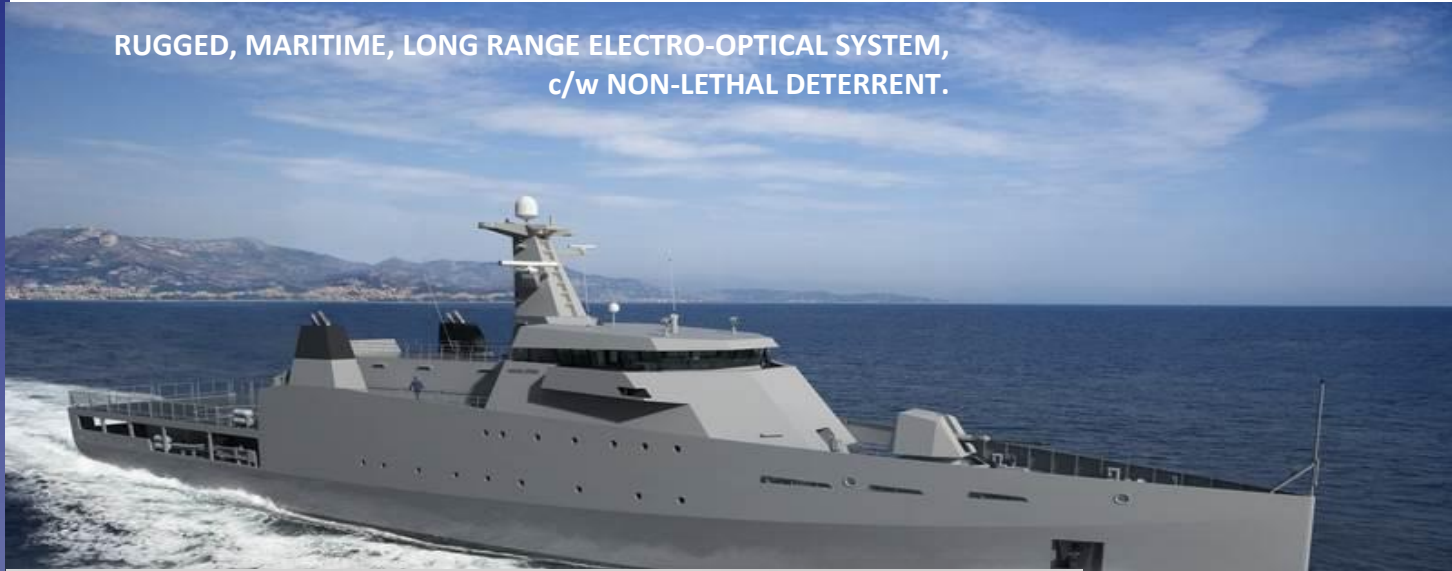


night navigator™ 7485 / 7490

RUGGED, MARITIME, LONG RANGE ELECTRO-OPTICAL SYSTEM,
c/w NON-LETHAL DETERRENT.



The best sensors in a wide spectrum, for passive awareness and non-lethal deterrent



RUGGED, MARITIME, ULTRA LONG RANGE ELECTRO-OPTICAL SYSTEM, complete with NON-LETHAL DETERRENT.

The Night Navigator™ 7485 integrates a High Definition Cooled Thermal Imager (MWIR), a HD Day camera, a Laser Range Finder, a Laser Dazzler and may as option include an image intensified night vision camera (NN7490). Night and day, it offers the sharpest visible details about the obstacles and threats around the vessel, at the longest range within the horizon line, available for non-governmental operation. Combined with the non-lethal dissuasive force of the Laser Dazzler and the accuracy of measurement of the distance to target of the Laser Range Finder It is rugged, maritized, compact and low maintenance. Control solutions are versatile, matching the requirements of the most demanding yacht security standards. Mast mounted payload, this full spectrum imaging system offers exceptional performances.

APPLICATIONS

- Yacht Safety and Security, including deterrence of threat
- Night Navigation & situational awareness
- ISR (Intelligence, Surveillance and Reconnaissance)
- EEZ (Exclusive Economic Zone) protection
- Long Range Surveillance
- Unmanned Surface Vessels operation
- Maritime SAR
- Anti-smuggling operations

BENEFITS

- **Detects, Recognizes and Identifies** targets at over 20km, night and day, in High Definition Cooled Thermal Imaging.
- **Provides a clear, highly detailed image**, in HD day, even into the digital zoom range.
- **Measures** the distance to target with the Integrated Laser Range Finder.
- **Delays, denies and defeats potential threat** with the high power non-lethal green Laser Dazzler, integrated into the payload for optimized convergence of sensors activity.
- **Tracks** Radar cursor, ARPA Target, AIS and video targets with use of deterrent
- **Streams H.264** (HD & SD) video and **communicates digitally** over IP network (Ethernet)
- **Outputs video in dedicated coax cable to the bridge: in HD-SDI** or composite analog **NTSC / PAL**
- **Enables Picture by Picture (PbP) and Picture in Picture (PiP)** of two live video signal outputs (zoom synchronized or independent)
- **Single payload** with no junction boxes or interface modules simplifies installations and retro-fits, while reducing maintenance.



night navigator™ 7485 /7490

SYSTEM FEATURES

HD COOLED THERMAL CAMERA

Spectral Range:	3 – 5 µm Cooled thermal imager
Sensor type:	High Definition (HD) MWIR - Photovoltaic InSb
Resolution:	1280 x 1024 pixels
Zoom:	10x Continuous optical zoom
Focal length:	25 to 250mm lens
Field of View:	28°(wide) to ~ 5° (narrow)

HD DAY / LOW LIGHT CAMERA

Sensor Type:	1/2.8" CMOS
Field of View:	63° to 2.3° FoV in HD mode, 1080i 47.8° to 1.7° FoV in SD video mode, 720p
Optical Zoom:	30x continuous
Digital Zoom:	12x continuous
Window Coating:	Hydrophobic

HD GATED IMAGE INTENSIFIED NIGHT VISION (NN7490 ONLY)

Sensor:	Super Gen II+
High Definition (HD) & SD	1080i/720p HD selectable (2 million pixels)
Luminous Sensitivity	0.000001 lux
Field of view	20°

LASER RANGE FINDER

Measuring range:	10 to 1500m
Resolution:	+/- 1m

LASER DAZZLER

Laser Power:	5000mW
Wavelength:	520 nanometers
Beam Diameter:	3 meters @ 500 meters (beam divergence 6 mrad in full angle)

RADAR CURSOR, ARPA & AIS TARGET TRACKING

Radar Cursor, ARPA and AIS target tracking via NMEA0183 (RS422/RS232) through supplied NMEA 0183 Network Interface Box.

VIDEO TRACKING

Video targets tracking via NMEA0183 (RS422/RS232).

CONTROLLER: HARDWARE OR GUI, IP BASED AND REMOTE-CONTROLLED SOLUTIONS

1. **Compact tactile controller** integrating HD color display for orientation and troubleshooting. (142 x 91 x 82mm)
2. **GUI (Graphical User Interface) SW**, either on **dedicated touchscreen** display (Panel PC) or as pop up window in PC; with USB joystick
 - 2.1. Two button joystick
 - 2.2. Rigid grip multifunction joystick
3. **GUI SW integrating the video feed**, for use on portable PC

All controllers offer Built in Test for remote diagnostic and are configured for optional additional controllers or remote control

PAYLOAD SPECIFICATIONS

System type:	3 axis gyro-stabilization ² , c./w. enhanced video stabilization
Pan Range:	continuous 360° AZ rotation
Tilt range:	-90° to +90° EL (dome up) or +90° to -90° EL (down) including stow position

SYSTEM INTERFACE

Video format on dedicated coax:	HD-SDI
Video streaming:	H.264 in HD and SD
Data:	RS422 or RS232, Ethernet for control

ENVIRONMENTAL

Ingress Protection Mark:	IP67
Compliant to:	MIL_STD 810G
Operational temperature:	-20°C to +55°C

WEIGHT AND DIMENSIONS

Weight:	~ 50 kg
Payload platform dimensions:	500 x 625 x 400mm (H x W x D) (subject to change without notice)
Keep clear diameter:	700mm (16.4 in)

POWER REQUIREMENTS

Voltage:	20 to 34VDC
Consumption:	200 to 300 W (based on configuration)

OTHER OPTIONS AND ACCESSORIES

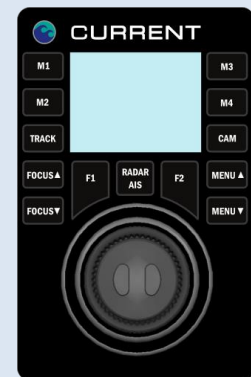
Custom dome color; Digital Video recorder; Cold weather operation to -40°C or -50°C; other EO sensors, handgrip multifunction joystick rigid or flexible

Contact us with your specific requirements

² resolved by 2 axis positioning



CONTROL SOLUTIONS



1. Compact tactile controller integrating data display and joystick



2. GUI SW either stand alone in dedicated panel PC touchscreen display or pop up window in existing PC



3. Remote control option

Specifications subject to change or improvement without notice. All Night Navigator sales are conditional to Canadian export license approval – 2018-02-20

