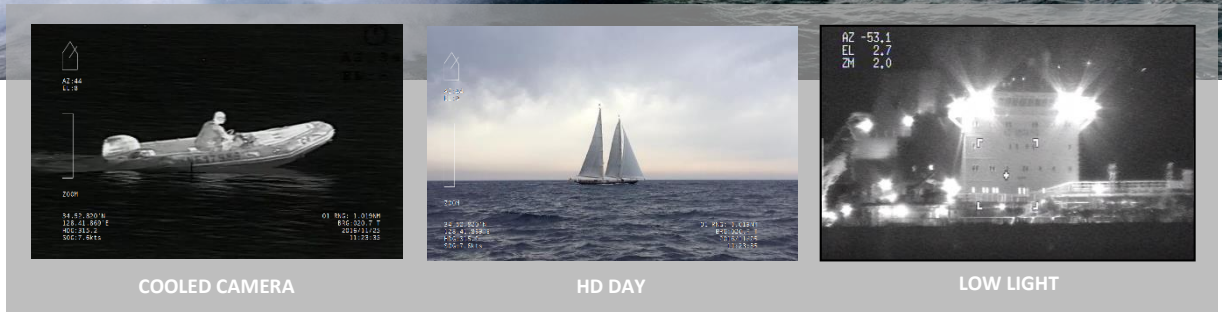


RUGGED. MARITIME. GYRO-STABILIZED. LOW MAINTENANCE



RUGGED. MARITIME. ISR. GYRO-STABILIZED. LOW MAINTENANCE.

The Night Navigator™ 6067 is a rugged, low maintenance, compact electro-optical system designed for commercial, leisure and paramilitary end users counting on reliable electro-optical systems for all missions in complex environments. Mast mounted payload, this full spectrum imaging system offers exceptional performances. It integrates a **MWIR cooled thermal imager**, a **high definition (HD) day camera / low light** in a **gyro-stabilized** sensor platform. It can be controlled from the bridge of a ship or through IP network in a control room or remote location.

APPLICATIONS

- ISR (Intelligence, Surveillance and Reconnaissance)
- EEZ (Exclusive Economic Zone) protection
- Long Range Surveillance
- Unmanned Surface Vessels operation
- Maritime SAR
- Safety and security at anchor and in harbor
- Tracking of potential threat or man overboard
- Situational awareness
- Asymmetric threats
- Anti-smuggling operations

BENEFITS

- **Rugged**, marine, **low maintenance** design
- **Zooms** 88x in MWIR cooled thermal and 360x in HD day
- **Detects** a NATO target at over 20km, night and day
- **Provides a clear, highly detailed image**, in HD day, even into the digital zoom range.
- **Increases object detection** in low level of light with best of class low light sensitivity.
- **Measures** the distance to the target up to 20km
- **Tracks** Radar cursor, ARPA Target, AIS and video targets
- **Streams H.264** (HD & SD) video with PiP and **communicates digitally** over IP network (Ethernet)
- **Outputs video in dedicated coax cable to the bridge: in HD-SDI or composite analog NTSC / PAL**
- **Proposes further** electro-optical sensors for **integration**: Laser Range Finder, Laser Dazzler, SWIR, Night vision etc.
- **Single payload** with no junction boxes or interface modules simplifies installations and retro-fits, while reducing maintenance.
- **Standardized mounting and cabling** for all Night Navigator 6000 series enables ease of payload swaps and future upgrades.
- **Designed to withstand marine environmental conditions** and proven by over 10 years and hundreds of successful operating installations worldwide.

night navigator™ 6067

SYSTEM FEATURES

THERMAL CAMERA

Spectral range:	3 - 5 μ m Cooled thermal imager
Sensor type:	640x512 (InSb FPA) MWIR (standard)
Resolution:	HD-SDI / PAL / NTSC / H.264
Field of View:	36° to 1.7° Continuous optical zoom (std FPA)
Zoom:	22x continuous optical, 4x digital zoom
Focal length:	15 - 330mm
Detection range ¹ :	NATO target >20km / Human to 13.9km

DAY / LOW LIGHT CAMERA

Sensor type:	1/2.8' CMOS
Field of View:	63° to 2.3° FoV in HD mode, 1080p30 47.8° to 1.7° FoV in SD video mode, 720p
Optical zoom:	30x continuous
Digital zoom:	12x continuous
Window coating:	Hydrophobic

LOW LIGHT HD CAMERA (FUNCTION)

Sensor Type:	1/2.8' CMOS
Low Light Sensitivity:	0.013Lux in B&W mode

LASER RANGE FINDER

Class:	1M
Wavelength:	1,565 to 1,575 nm
Measuring range:	10km for NATO size target - 20km for large objects

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 target autoscanning, detection and tracking in HD mode

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 (two button joystick or Rugged Rigid Grip)
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 digital video stabilization
Pan Range:	Continuous 360° AZ rotation
Tilt range:	+/- 90° EL including stow position
Color:	Matterhorn white glossy, navy grey or sand. Custom on request

SYSTEM INTERFACE

Video format on dedicated coax:	HD-SDI (convertible to DVI or HDMI for full HD on coax to the bridge display) or composite analog NTSC / PAL (SD resolution only)
Video streaming:	H.264 in HD & SD with PIP/PbP
Data:	Radar cursor, ARPA & AIS Tracking via RS422 or RS232; Ethernet for control

ENVIRONMENTAL

Ingress Protection Mark:	IP67
Built to:	Built to MIL STD 461 & MIL-STD 810 with MIL SPEC connectors
Operational temperature:	-20°C to +55°C

WEIGHT AND DIMENSIONS

Weight:	≤20 kg (~44 lbs.)
Diameter payload ³ :	361mm (14.1 in)
Height payload ³ :	422mm (16.6 in)

POWER REQUIREMENTS

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

LASER POINTER OPTION (BASED ON CUSTOMER SPECIFICATIONS)

Nominal Wavelength: 852nm or 830nm subject to requirements

LASER ILLUMINATOR OPTION (BASED ON CUSTOMER SPECIFICATIONS)

Nominal Wavelength: 852nm or 830nm subject to requirements

OTHER OPTIONS AND ACCESSORIES

Other sensors: Night Vision, SWIR; Custom dome color; Cold weather operation to -40°C or -50°C; Digital Video recorder; non-lethal deterrent Laser Dazzler, ... Contact us with your specific requirements

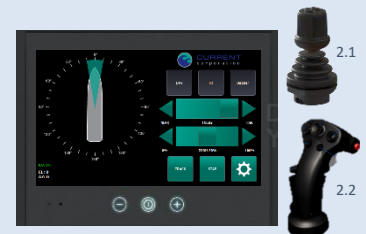
¹ theoretical calculation using Johnson's criteria & not accounting for atmospheric conditions - ² resolved by 2 axis positioning - ³ Larger movement space required



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 PC with optional USB joystick [2.1] or RRG [2.2]



3. Remote control option

Specifications subject to change or improvement without notice. All Night Navigator sales are conditional to Canadian export license approval — Feb 2019



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