NEW & EXCLUSIVE – FULL HD PAYLOAD

RUGGED, MARITIME, ULTRA LONG RANGE ELECTRO-OPTICAL SYSTEM
The Night Navigator™ 7085 integrates a High Definition Cooled Thermal Imager (MWIR) and a HD Day camera. Additional available options include a Laser Range Finder and an image intensified night vision camera. 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. It is rugged, marinized, 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
• 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 (option).
• Highlights the scene at night in HD night vision (NN7090 model)
• Tracks Radar cursor, ARPA Target, AIS and video targets with use of deterrent
• 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
• Enables 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.
SYSTEM FEATURES

HD COOLED THERMAL CAMERA
Spectral Range: 3 – 5 µm Cooled thermal imager
Sensor type: High Definition (HD) MWR - Photovoltaic InSb
Resolution: 1280 x 1024 pixels
Zoom: 11x Continuous optical zoom
Field of View: 28.7° (wide) to ~ 2.5° (narrow)

HD DAY / LOW LIGHT CAMERA
Sensor Type: 1/2.8" CMOS
Field of View: 63° to 2.3° FoV in HD mode, 1080p30
Optical Zoom: 30x continuous
Digital Zoom: 12x continuous
Window Coating: Hydrophobic

HD GATED IMAGE INTENSIFIED NIGHT VISION - OPTIONAL
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 - OPTIONAL
Measuring range: multiple ranges available
Class: 1M

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
Tracking of targets displayed on the monitor in HD MWIR and HD Day

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 stand alone in dedicated panel PC (touchscreen display) 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, 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
Color: Matterhorn white glossy, navy grey, 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 resol. only)
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: <35 kg – subject to configuration
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
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

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

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