
CURRENT
THE SCIENCE OF SEEING

TURN NIGHT INTO DAY

ENHANCED SECURITY & SAFETY

CURRENT's Night Navigator™ series are high performance systems with excellent image quality and built for long-range recognition of objects, obstacles, and threats. It enables early decision making and preparedness resulting in increased safety and security.

NN 8000- 360° 360° live panoramic situational awareness platform combined with long-range verification.

NN 8000 Extreme long-range recognition for intelligence and surveillance.

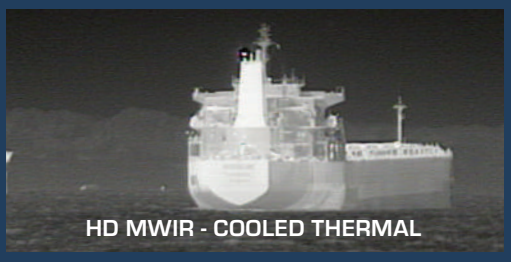
NN 4000 Long-range recognition with option of enhanced awareness and active protection.

NN 3000 Mid-range obstacle recognition for all maritime operations.

NN 2000 The solution for all budgets for secure navigation in an ultracompact platform.

NN HSC Certified to IMO HSC code, Resolution MSC.94(72).

FULL SPECTRUM OPTICAL INFRARED CAMERA SYSTEMS



360° REAL TIME AWARENESS

PANORAMIC HD IR SYSTEMS

Consisting of a high-definition thermal camera array integrated with a gyro-stabilized EO/IR system, these systems provide a previously unavailable level of situational awareness with long range object and threat verification. Available in multiple configurations and full frame rate of 30Hz, it can be used by operators who prefer and require more information to aid human decisions. It can also be integrated into an AI-decision based infrastructure.

Objects detected in the panoramic image can be zoomed in on, providing critical details.

Output video can display full 360° or other segments, depending on operational requirements.

INSTALLATION CONFIGURATIONS

Single 360° system requires top position on the mast to provide an unobstructed 360° view.

Single 225° system when the top position on the mast is unavailable and the area of interest is only forward.

Two 180° systems mounted forward and aft, providing 360° coverage when a single 360° unobstructed view is not possible.

Two 180° systems mounted port and starboard, providing 360° coverage when a single 360° unobstructed view is not possible.

SENSOR CONFIGURATIONS

	INFRARED CAMERA (IR)								DAY CAMERA			AVAILABLE SENSORS & FUNCTIONALITIES						
	Thermal Imager	HD IR	Field of View IR	Lens f/#	Optical Zoom	Digital Zoom	Human*	NATO**	HD Day Camera	4x Option	Zoom Ratio	Searchlight	Video Tracking	LRF	Laser Dazzler	II Night Vision	SWIR	Laser Illuminator
HSC	LWIR		Fixed 22.6°				-	-										
NN 2000 SERIES																		
2005	LWIR		Fixed 24.8°	f/1.2		4x	0.7 km	1.7 km	✓		30x							
2015	LWIR		Fixed 17.6°	f/1.2		4x	1.0 km	2.4 km	✓		30x							
2017	LWIR		Fixed 12.4°	f/1.2		4x	1.4 km	3.4 km	✓		30x							
2025	LWIR		43° - 8.2°	f/1.2	5x	4x	2.1 km	5.1 km	✓		30x		•					
NN 3000 SERIES																		
3025	LWIR		25° – 6°	f/1.6	4x	4x	2.9 km	7.1 km	✓	•	30x		•					
3026	LWIR		43° – 8.2°	f/1.2	5x	4x	2.1 km	5.1 km	✓	•	30x		•					
3040	LWIR	✓	68° – 10°	f/1.4	7x	4x	2.8 km	6.8 km	✓	•	30x		•					
3050	MWIR		28° – 2°	f/5.5	14x	4x	5.8 km	14.1 km	✓	•	30x		✓					
3055	MWIR		32° – 1.8°	f/5.5	18x	4x	6.3 km	15.3 km	✓	•	30x		✓	•				
3057	MWIR		32° – 1.8°	f/5.5	18x	4x	6.3 km	15.3 km	✓	•	30x		✓	✓				
3615	LWIR		Fixed 17.6°	f/1.2		4x	1.3 km	3.2 km	✓	•	30x	✓	•					
3620	LWIR		Fixed 27.8°	f/1.4		4x	1.3 km	3.2 km	✓	•	30x	✓	•					
NN 4000 SERIES																		
4030	LWIR		25° – 4.1°	f/1.4	6x	4x	4.2 km	10.1 km	✓	•	30x		•			•		
4040	LWIR	✓	41° – 6.6°	f/1.4	6x	4x	4.2 km	10.1 km	✓	•	30x		•			•		
4065	MWIR		35° – 1.8°	f/4	20x	4x	6.3 km	15.3 km	✓	•	30x		✓	•	•		•	•
4085	MWIR	✓	46° – 2.4°	f/4	20x	4x	9.5 km	>20 km	✓	•	30x		✓	•	•		•	•
4465	MWIR		35° – 1.8°	f/4	20x	4x	6.3 km	15.3 km	✓	•	30x		✓	✓	✓		•	•
4485	MWIR	✓	46° – 2.4°	f/4	20x	4x	9.5 km	>20 km	✓	•	30x		✓	✓	✓		•	•
NN 8000 SERIES																		
8040	LWIR	✓	41° – 4.4°	f/1.5	9x	4x	6.3 km	15.2 km	✓	•	30x		✓					
8042	LWIR	✓	26.5° – 3.3°	f/1.5	7x	4x	8.4 km	>20 km	✓	•	30x		✓	•	•			
8065	MWIR		16° – 0.9°	f/4	18x	4x	12.6 km	>20 km	✓	•	30x		✓	•	•			
8085	MWIR	✓	14.5° – 1.2°	f/4	12x	4x	19.0 km	>20 km	✓	•	30x		✓	•			•	•
8485	MWIR	✓	14.5° – 1.2°	f/4	12x	4x	19.0 km	>20 km	✓	•	30x		✓	✓	✓		•	•

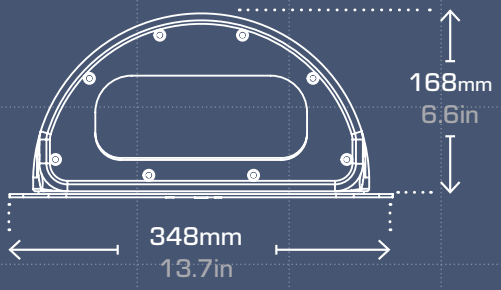
II NIGHT VISION = Image Intensified Night Vision
LWIR = Long-Wave InfraRed (Uncooled thermal imaging 8-14µm)
MWIR = Mid-Wave InfraRed (Cooled thermal imaging 3-5µm)
SWIR = Short-Wave InfraRed
LRF = Laser Range Finder
✓ = Standard feature • = Optional feature

Other Configurations Available

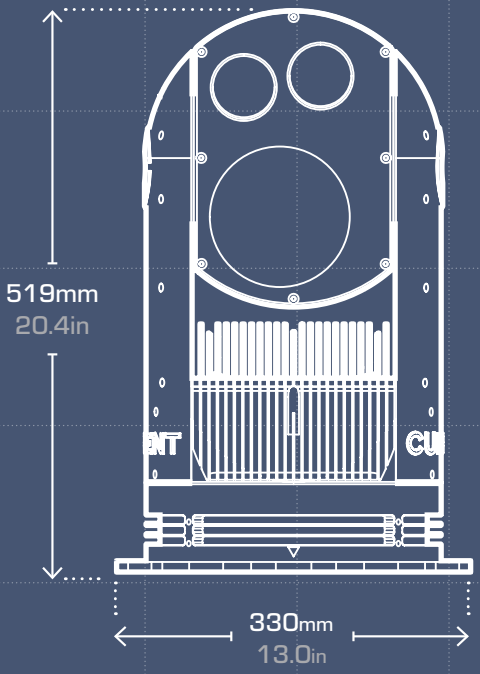
Theoretical calculations based on "Johnson Criteria", to achieve a 50% probability for an observer to detect an object, not taking into consideration signal level, detector sensitivity, atmospheric conditions and other factors. 2 pixels on target, used for LWIR and 3 for MWIR.
**Human target (1.8m x 0.5m) **NATO target (2.3m x 2.3m)*

DIMENSIONS

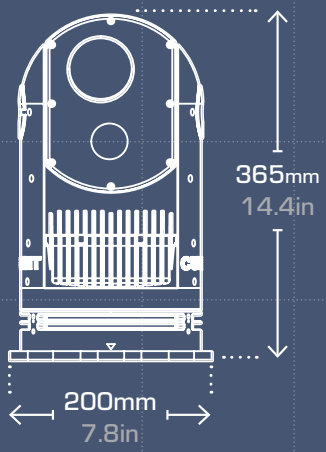
HSC SERIES
5.2kg / 12lbs



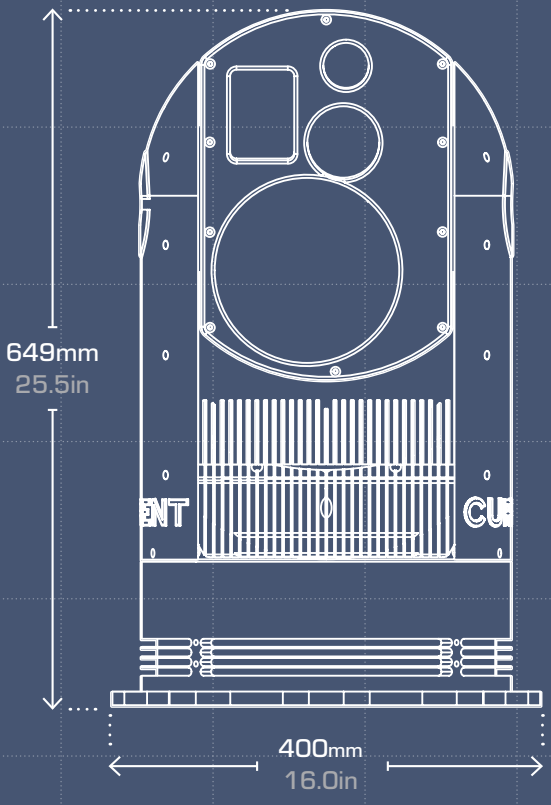
4000 SERIES
32kg / 70lbs



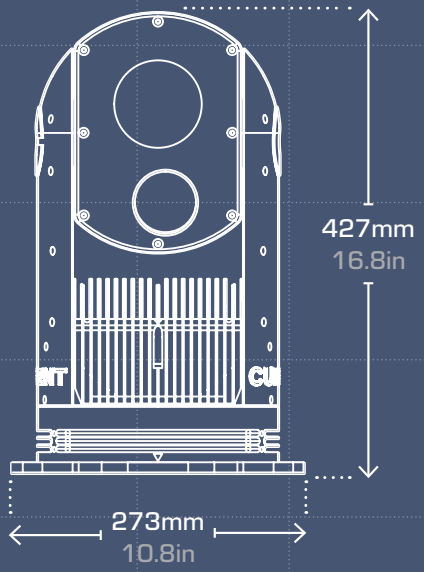
2000 SERIES
12kg / 26lbs



8000 SERIES
70kg / 155lbs



3000 SERIES
20kg / 44lbs



Exact weight depends on sensor specification.

FEATURES

VIDEO TRACKING

Automatically follows operator selected objects of interest.

RADAR & AIS SLEWING

Interfaces with ship systems and tracks selected radar/AIS targets.

H.264 RTSP VIDEO STREAM

Network enabled video from two sensors simultaneously.

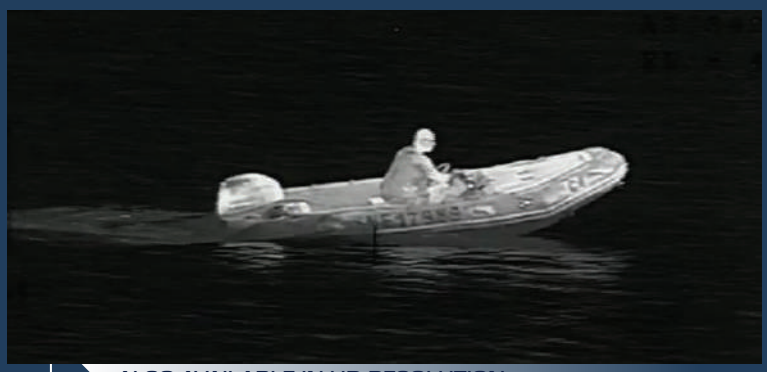
MOTION RANGE

360° continuous pan and +/- 90° tilt.

STABILIZATION

Gyro-stabilization and video stabilization.

SENSORS AND CONFIGURATIONS



ALSO AVAILABLE IN HD RESOLUTION

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COOLED THERMAL IMAGING

LONG-RANGE SECURITY

Mid-Wave InfraRed (MWIR), or Cooled Thermal Imaging, offers continuous optical zoom with a narrow field of view for long distance detection, recognition and identification. **HD MWIR** offers 2.8x or 4x the resolution of MWIR for detection, recognition, and identification.

UNCOOLED THERMAL IMAGING

MID-RANGE SECURITY

Long-Wave InfraRed (LWIR), or Uncooled Thermal Imaging, offers mid-range observation and is used in missions requiring 24/7 use. Offering various levels of optical zoom, these systems are an affordable solution for a broad range of uses. **HD LWIR** is now available to further enhance performance and capabilities with 2.5x better resolution.

HD DAY

High Definition 30x optical zoom and best in class low-light sensitivity makes this the perfect companion for the thermal imager.

4k option increases the resolution by 4x to allow longer range identification and sharper image quality.

SWIR

Short-Wave InfraRed can be added to thermal and day to improve visibility in haze, mist, rain, fog and other challenging atmospheric conditions.

LASER DAZZLER

The laser dazzler is a non-lethal deterrent when combined with the safety of the Laser Range Finder, adds an extra level of security on board for active protection.

It can be used as an escalation of force to increase security and safety on board.

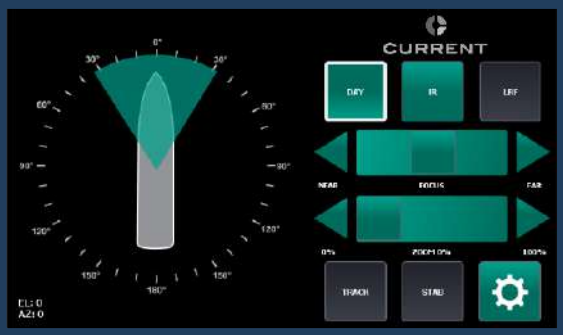
SEEING MORE

...YOUR WAY

Flexible IP network control solutions for onboard, remote, and autonomous operation.

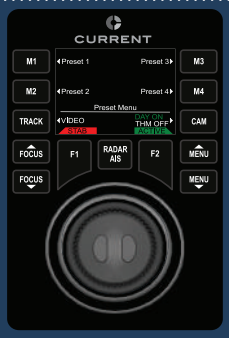
VIDEO GUI

Live video feed with full control of all system functions on one interface. Optimized for operation on a touchscreen with USB joystick/RRG or standard PC with trackball/ mouse. Can be run on a CURRENT or customer supplied PC or Panel PC.



CONTROL GUI

Provided on an 8" Panel PC touchscreen, it can be operated standalone or with USB joystick/ RRG for more precise pan and tilt positioning. Main screen provides basic control functions with menus for advanced functions. Requires a separate HD-SDI or RTSP display for video.



COMPACT CONTROLLER

Compact solution with integrated 2-button joystick. Provides basic functions through buttons and more advanced functions through on screen menus. Requires a separate HD-SDI or RTSP display for video.

ACCESSORIES

2-BUTTON JOYSTICK

Provides intuitive pan, tilt, zoom control of the sensor platform. Connects to PC via USB.

RUGGED RIGID GRIP (RRG)

All critical functions are available in the ergonomic, ambidextrous fixed grip. Precise camera control is achieved while allowing the operator to maintain focus on the live video. Connects to PC via USB.

INTEGRATION OPTIONS

TASK FORCE INTEGRATION

- Command and Control system (C2)
- Combat Management System (CMS)

VIDEO RECORDING

- Network recording of two video streams on VMS or dedicated DVR.

3RD PARTY SYSTEMS

- Bridge Interface
- HMI, INS, VMS
- Security System
- Autonomous Navigation
- AI
- Pelco D & ONVIF compatible

CURRENT

THE SCIENCE OF SEEING

CANADIAN EXPORT REGULATIONS

Equipment subject to Canadian Export regulations. Trans-shipment or diversion from specified end use are prohibited. Equipment is ITAR free.

WARRANTY

CURRENT is building rugged, marinized, low maintenance systems. CURRENT offers technical training for integrators and supports its worldwide customers through a growing network of local partners, remote support, online troubleshooting and updates.

CANADA

CURRENT Scientific Corporation
1588 Kebet Way
Port Coquitlam, BC, V3C 5M5
CANADA

THE NETHERLANDS

CURRENT Scientific B.V
Tappersweg 6 F
2031 ET Haarlem
THE NETHERLANDS

SALES@CURRENTCORP.COM
TEL: +1 604 461 5555

WWW.CURRENTCORP.COM