

# TURN NIGHT INTO DAY

## > ENHANCED SECURITY & SAFETY

Current's Night Navigator™ solutions offer the highest performance and best image quality for long range recognition of objects, obstacles and threats. It enables early decision making and preparedness, resulting in increased safety and security.

NN **BDDD** Long range detection and identification of threats for intelligence and surveillance.

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

Mid range obstacle recognition for all maritime and vehicle mount operations.

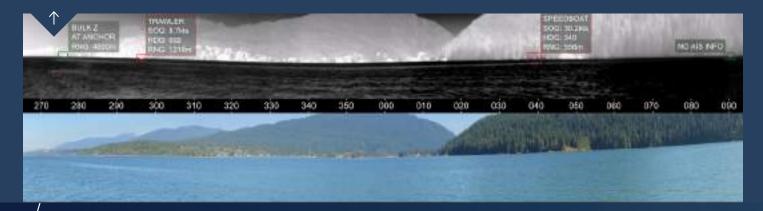
NN 2000 The reliable solution fitting all budgets for secure navigation in a ultra compact platform.

NN HSC Night Vision certified to IMO HSC code, Resolution MSC.94(72).



#### 360° PANORAMIC SITUATIONAL AWARENESS

360° live panoramic situational awareness alerts the vessel to asymmetric threats in infrared, while getting long range confirmation and classification of targets through the high performance optics in the connected turret.







# **COOLED THERMAL IMAGING**

#### LONGEST RANGE

MidWave InfraRed (MWIR), or Cooled Thermal Imaging, offers continuous optical zoom down to the narrowest field of view for longest distance of detection, recognition and identification. HD MWIR offers 4x the resolution of MWIR for earlier decision taking and best security on land and at sea.

# **UNCOOLED THERMAL IMAGING**

#### **MID RANGE**

LongWave InfraRed (LWIR), or Uncooled Thermal Imaging, offers mid range observation and is used in missions requiring 24/7 use. It is offered in various choices of optical zoom and affordable solutions to the broader customer base. HD LWIR is now available to further enhance performance and capabilities with 2.5x better resolution.



### → IMAGE INTENSIFIED NIGHT VISION

Provides the best object detection in darkness, when the temperature of the object blends in with the temperature of its surroundings and visualizes flashing lights up to the horizon.



Provides 4x the resolution of HD day for identification of threats at longer range and sharper image quality. Used in Al for Autonomous Navigation / Vehicles.



### → LASER DAZZLER

Optional sensor adding non-lethal, active protection to passive awareness of threat, while alerting intruders to their boundary crossing in escalation of force.

# SWIR (SHORTWAVE INFRARED)

Adding comprehension of the surroundings in situations with smoke, haze, fog, versus Day or near IR sensors.



# **MARINE**

# > SENSOR CONFIGURATIONS

			INFRARED CAN	DE	DETECTION RANGE			AVAILABLE ADDITIONAL SENSORS & FUNCTIONALITIES					
2.	Thermal Imag:	HD IR	Field of View	Zoom Ratio	Human*	NATO**	Video Track	LRF	Laser Dazzler	II Night Visios	4K Day	SWIR	Laser Muminator
2000 9	ERIES												
NN 2005	LWIR		Fixed 24.8°	4x digital	0.93 km	2.25 km							
NN 2015	LWIR		Fixed 17.6°	4x digital	1.3 km	3.16 km							
NN 2025	LWIR		43° – 8.2°	5x optical	2.8 km	6.8 km	•						
NN 2030	LWIR	✓	Fixed 27.8°	4x digital	1.3 km	3.2 km	•						
NN 2032	LWIR	✓	Fixed 19.8°	4x digital	1.9 km	4.5 km	•						
3000 9	SERIES												
NN 3025	LWIR		25° – 6°	4x optical	2.9 km	7.1 km	•				•		
NN 3030	LWIR		42° – 6.2°	6x optical	2.8 km	6.8 km	•				•		
NN 3040	LWIR	✓	68° – 10°	6x optical	2.8 km	6.8 km	•				•		
NN 3050	MWIR		28° – 2°	14x optical	5.8 km	14.1 km	•				•		
NN 3055	MWIR		35° – 1.8°	20x optical	6.3 km	15.3 km	•	•			•		
4000 5	ERIES												
NN 4030	LWIR		25° – 4.1°	6x optical	4.2 km	10.1 km				•			
NN 4040	LWIR	<b>✓</b>	41° – 6.6°	6x optical	4.2 km	10.1 km	•			•	•		
NN 4065	MWIR		30° – 1.8°	20x optical	6.3 km	15.3 km	✓	•	•		•	•	•
NN 4085	MWIR	✓	40° – 2.4°	20x optical	9.5 km	>20 km	✓	•	•		•	•	•
NN 4425	LWIR		25° – 6°	4x optical	2.9 km	7.1 km	•	<b>✓</b>	✓		•		
8000 9	SERIES												
NN 8040	LWIR	<b>✓</b>	41° – 4.4°	9x optical	6.3 km	15.2 km	✓				✓		
NN 8042	LWIR	<b>✓</b>	26.5° – 3.3°	7x optical	8.4 km	>20 km	<b>✓</b>				✓		
NN 8050	MWIR		11.9° – 0.8°	14x optical	14.8 km	>20 km	<b>✓</b>				✓	•	•
NN 8065	MWIR		17.2° – 0.9°	20x optical	12.6 km	>20 km	✓	•	•		✓	•	•
NN 8085	MWIR	<b>✓</b>	21.5° – 1.2°	20x optical	19.0 km	>20 km	✓	•	•		✓	•	•

\*Human target (1.8m x 0.5m) \*\*NATO target (2.3m x 2.3m)

✓ = Standard feature

• = Optional feature

LWIR = Long Wave Infrared (Uncooled thermal imaging 8-14 $\mu$ m)\*

MWIR = Mid Wave Infrared (Cooled thermal imaging  $3-5\mu m$ )\*

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.



## > FEATURES



### ENVIRONMENTAL SEALING

Water Ingress Protection (IP) 67



#### MIL STANDARD

Built to MIL-STD 810 & MIL-STD 461



# OPERATIONAL TEMPERATURE

-20°C to 50°C (option to -40°C)



### MOTION RANGE

360° continuous pan and +/-90° tilt



### GYRO-STABILIZATION

3 axis gyrostabilization\*

\*Resolved by 2 axis positioning



# → HD DAY ZOOMED OUT

Shows the same footage as what is visible to the eye, in HD Color and BW low light for security room and remote streaming.

# HD DAY ← ZOOMED IN ⊿

30x optical zoom and best in class low light sensitivity makes this the perfect companion of the thermal imager.



# → LASER ILLUMINATOR

Illuminate the scene in the infrared spectrum, to view in low light camera in covert operations.

### LRF ←

Laser Range Finder (LRF) measures the distance to an object displayed on the video.



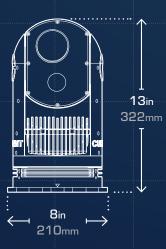
# **FOOTPRINT**

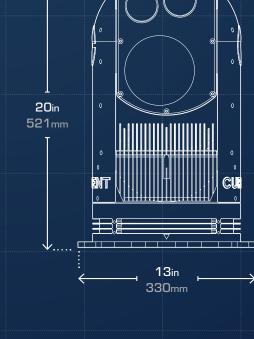




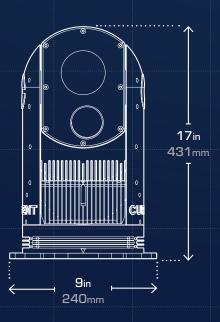








3000 SERIES <20kg / 44lbs



25in 648mm CUF

Specifications subject to change without notice, please refer to technical drawings for mounting.

# **SEEING MORE**

# ...YOUR WAY

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



## → ! VIDEO GUI

Video integrated into the GUI (Graphical User Interface) on Panel PC, connected to the IP network and streaming video in RTSP H.264 / HD-SDI. Stand alone as touchscreen or combined with USB joystick / RRG. Optimized for 16:9 aspect ratio widescreen display in full HD. Can control one or multiple systems at the same time.



# **CONTROL GUI**

GUI (Graphical User Interface) optimized for 8" Panel PC connected to the IP network. Stand alone as touchscreen or combined with USB joystick / RRG. Video displayed separately either on monitor in SDI or streaming video in RTSP H.264 in wide screen full HD.



# COMPACT CONTROLLER

Compact solution connected to the IP network, including 2-button joystick.

## **ACCESSORIES**

# 2-BUTTON JOYSTICK



Connected to Panel PC by USB cable. Functionalities include: Pan & tilt, zoom, switch between cameras, track and focus.

### RUGGED RIGID GRIP (RRG)



Connected to Panel PC by USB cable. All critical functionalities accessible in an ambidextrous, rugged, firm grip for precise camera control and full focus on the live video.

### MORE FEATURES



# INTERFACE TO THIRD PARTY C2

Protocol for integration into navigation system/ video management system/ C2.



#### **VIDEO RECORDING**

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



### **AI OPTIMISED**

The video quality and control solutions are optimized for operation of Autonomous and Unmanned Surface Vessels.





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 builds rugged intelligence and surveillance EO/IR systems designed for low maintenance. Current offers technical training for integrators and supports its worldwide customers through a growing network of local partners, remote support, online troubleshooting and updates. For more details, please visit www.currentcorp.com

#### **CANADA**

Current Scientific Corporation 2933 Murray Street Port Moody, BC, V3H 1X3 CANADA

#### THE NETHERLANDS

Current Scientific B.V. Tappersweg 6 F 2031 ET Haarlem NETHERLANDS



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

WWW.CURRENTCORP.COM