



THE SCIENCE OF SEEING

RUGGED. MARITIME. LOW MAINTENANCE.

Night Navigator™ HSC是一种坚固耐用、航海化和低维护的摄像系统，符合IMO Resolution MSC.94 (72) 的高速要求，通过HSC代码认证，并获得 Wheel Mark认证。它专为搭载乘客或船员的高速船夜间导航而设计，可用于任何需要增强视力的夜间航行船只。Night Navigator™ HSC是高速安全导航的关键设备，因为它能够提供导航路径中潜在障碍物的可见性。与之前使用图像增强夜视摄像头的NN HSC版本不同，最新的NN HSC包含了LWIR热成像仪，允许系统在白天和晚上使用。

应用：

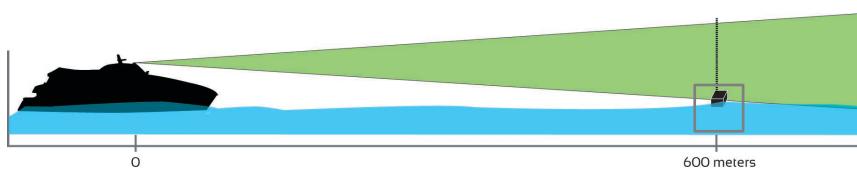
- 高速客轮
- 高速海上供应船
- 任何船只的助航设备

特征：

- 坚固、航海、低维护设计
- 全天候检测障碍和威胁的辅助工具
- 单一有效载荷可实现简单的安装和改装，同时减少维护
- 微调位置、预设位置、航向等的屏幕显示 (OSD)
- 执行自我诊断并评估内部通信和组件状态，包括内部温度、湿度水平以及平移和倾斜参数
- 通过20多年的经验和全球数百个成功的操作装置，设计并证明能够承受海洋环境条件

IMO DETECTION REQUIREMENT FOR ISO 16273 - IMO RESOLUTION MSC.94(72)
The Night Navigator HSC detects standard IMO target beyond the required 600 meters

HSC code IMO target definition:
Black metal target, 50% immersed in the water, in
the water at least 24 hours before test at night
Target size 1.5m (L) x 1.5m (W) x 1m(H)



TARGET CONSISTENTLY
DETECTED AT 1200m

系统特征：

热成像仪：

传感器类型	Long Wave Infrared
分辨率	640 x 480 Pixels
镜头	Athermalized Fixed Focus
视角	22.6°

传感器平台：

扫描范围	0° / 10° / 20° Port & Starboard
倾斜范围	±9°
电压/功率	24VDC/20W (typical)
尺寸	348(W) x 168(H) mm
重量	5.2kg
Environmental	Certified & Compliant to IEC 60945
操作温度	-20°C to +50°C

视频显示：

类型	15.6" – 16:9 Ratio LCD
分辨率	1920 x 1080 Pixels
可视角度	89° (H); 89° (V)
电压/功率	24VDC/48W (typical)
输入视频格式	DVI
尺寸	425(W) x 293(H) x 108(D) mm
重量	6.5kg

触摸屏控制器：

类型	8.0" LCD
分辨率	800 x 600 Pixels
可视角度	85°(H); 85°(V)
电压/功率	24VDC/20W (typical)
尺寸	229(W) x 157(H) x 66(D) mm
重量	1.6kg

视频转换器：

类型	SDI to DVI
特征	Includes Separate Power Supply For 24VDC Operation
电压/功率	24VDC/5W (typical)
尺寸 (w/o Power Supply)	217(W) x 120(H) x 58(D) mm
重量 w/o Power Supply)	0.8kg

NN HSC INCLUDES



Sensor Platform & Cables



Hatteland 8" Touchscreen Controller



15.6" Display

HSC Code - Type Approval Certification

Certification Number: MEDB000007RZ

ISO 16273:2003	Night vision equipment for high-speed craft Operational and performance requirements, methods of testing and required test results
IEC 60945 (2002)	Maritime navigation and radio communication equipment and systems – General requirements Methods of testing and required test results
IEC 62288 (2014)	Maritime navigation and radio communication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results
MSC.36 (63)	International Code of Safety for High-Speed Craft, 1994
MSC.94 (72)	Performance Standards for Night Vision Equipment for High-Speed Craft
MSC.97 (73)	International Code of Safety for High-Speed Craft, 2000
MSC.191 (79)	Performance Standards for the Presentation of Navigation-Related Information on Shipborne Navigational Displays
Wheelmark	European Marine Equipment Directive – EU Directive 2014/90/EU (MED)