



Night Hunter II High Performance EO/IR ISR and Targeting System

*Incorporates
 Night Hunter
 Maritime Surveillance,
 JSF EO DAS and
 LITENING imaging and
 tracking algorithms and
 architecture into new
 generation system*



Northrop Grumman's Night Hunter II (NH II) electro-optic (EO)/infrared (IR) intelligence, surveillance, reconnaissance (ISR) and targeting system provides real-time imagery and targeting at long ranges. The NH II leverages imaging and tracking algorithms of the production Night Hunter Maritime Surveillance System, the Joint Strike Fighter (JSF) EO Distributed Aperture System (DAS) and the combat proven LITENING targeting pod on F-16, AV-8B, F-15, and A-10. The NH II is a combination of Northrop Grumman's sensor and processing capabilities and its teammate Sonoma Design Group's patented high performance gimbal technologies.

The NH II has been optimized for passive imaging at standoff ranges in both the visible and IR regions:

- Large 11-inch aperture in 21-inch turret design
- Auto detect, point track, area track modes

- Step-stare capable at 3,000 km²/hour
- Superior pointing stability over full 360 degrees
- Light weight 200 lb system
- Laser ranging and designation support targeting of latest weapons
- Sensor and algorithm technologies support spiral development
- Scalable design uses common gimbal architecture from 18 to 24 inches with apertures from 8 to 13 inches

NH II's open and modular architecture and very large available sensor volume provides excellent growth potential. NH II's light weight and low sensor placement offers ease of installation into platforms such as those under evaluation for the United States Navy's Multimission Maritime Aircraft (MMA) and Broad Area Maritime Surveillance (BAMS) programs.

Night Hunter II

High Performance EO/IR ISR and Targeting System

Northrop Grumman can provide the next generation ISR and Targeting system at an affordable price now with production underway

Maximum Performance

- Largest aperture for class, 11 inch
- Superior detection and recognition ranges
- Gimbal supports six sensors
- Sensor and algorithm technologies support spiral development

Versatile Operations

- Full 360-degree continuous operation
- Operates in any orientation
- Search, detect, localize, track, classify and identify
- Very low target location error with embedded INS and LRF
- Laser designation targeting option

Enhanced Processing

- Autonomous operation
- Auto target queuing
- Point track and area track
- Image sharpening and frame averaging
- Symbology overlay
- Band width mitigation techniques

Versatile Turret will accommodate up to six sensors for improved performance and flexibility

1. FLIR – The large aperture enables a longer focal length which coupled with the highly stabilized system results in the use of a very narrow field of view (FOV) and high NIIRS ratings at standoff ranges. Both 640 x 512 and 1024 x 1024 MWIR detectors are offered.

2. Spotter CCD-TV – The same turret features result in a very narrow FOV, zoom charged couple device (CCD) color television camera with digital output.

3. 27X Zoom CCD-TV – A second color CCD is also provided in a 27X Zoom for wide area evaluation.

4. Laser Rangefinder – The LRF is available for range determination enabling very small target location errors. The LRF may be integrated through the large aperture for even longer range determination.

5. Laser Designator – The laser designator is integrated into the turret retaining all of the other sensors permitting targeting in addition to the full ISR performance.

6. Sixth Sensor – The NH II design accommodates a sixth sensor which will use the large aperture for future performance growth.

7. Inertial Navigation Sensor – The NH II INS is mounted on gimbal and isolates the sensor payload from any static or dynamic misalignments. This results in highly accurate line-of-sight pointing and target inertial tracking.

8. Scalable Turret Design – The same turret architecture is available in sizes from 18 inches to 24 inches. This ensures that the maximum performance possible is available for each application.



NH II Dimensions

	Turret	Processor
L x W x H	20.8 x 20.8 x 25.6 in.	13 x 8x11 in.
Weight	155 lb	35 lb
Power	400 W	100 W

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