



BULLETIN

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NIGHT OBSERVATION DEVICE

Background: Hall & Watts Defense Optics Limited of the United Kingdom has developed the W401 Night Observation Device for long-range battlefield and internal security surveillance. It is shown in Figure 1 mounted on a pan and tilt dividing head and low-level tripod but is adaptable to fit a variety of angulation heads and tripod systems.



Figure 1. The W401 Night Observation Device.

- Normal viewing enables detection and location of static or moving targets up to 2000 m and recognition and identification of targets within a range of 1500 m.
- When mounted on a pan and tilt dividing head, bearings to targets can be obtained.
- The pan and tilt dividing head may in turn be mounted either on a low-level tripod in a ground role or on any suitable vehicle interface.

Specifications:

Night Observation Device

Magnification	x7
Field of View	138 mils (7.8°)
Focus Range	20 meters to infinity
Graticule	Available if required
Image Intensifier Tube	25 mm second generation
Power Supply	IX lithium-thiocyrl-chloride 3.5-V AA cell
Length	42 cm
Overall Diameter	24 cm
Weight	8.5 kg
Battery Life (continuous use)	18 hrs
Quality Assurance	NATO Defense Standard AQAP 4

Pan and Tilt Dividing Head

Graduations	20 mils
Numbered	Every 100 mils
Accuracy	+/- 5 mils
Height	140 mm
Diameter	140 mm
Weight	1.8 kg

Low-Level Tripod

Height	110 mm
Length (triangular)	365 mm
Weight	1.6 kg

Description: Attributes of the W401 are as follows:

- Is one of the lightest devices of its type on the world market.
- Uses 25-mm second-generation image intensifier tube.
- Capable of long-range night surveillance use.
- In clear starlight and with x7 magnification, permits observation of men and vehicles at a range of up to 7 miles (11.2 km).
- With 40-percent contrast in clear starlight, targets easily visible.

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