

PORTABLE PASSIVE DRIVER/INFANTRY GOGGLE SYSTEM NVB 301



x5 Magnification System



MAIN FEATURES

- Optimum resolution, high gain and photo response to near infrared
- Hand held and on head strap for hands free operation
- Light weight, maximum weight 680grams
- Universally available "AA" batteries
- Momentary "IR switch"
- "Automatic highlight cutoff" to protect image intensifier
- "IR on indicator"
- "Low voltage indicator"
- "quick release lever" to permit one handed attachment/detachment from helmet or head harness

WEIGHT

Main assembly and lens: not more than 680 g
Collimation: 1 dg + 1 less than ½ dg divergence
Image Intensifier: double proximity focused, 18mm tube with glass input and straight f.o. output

STANDARD ACCESSORIES

- **Head Mount Assembly:** Allows hands free operation with adjustments to accommodate the user's head size and eye position
- **Eye cups:** To prevent the emission of stray light or facial reflections or anything that may scratch the lens
- **Carry cases:** Includes soft carry case
- **Shoulder strap:** Attaches to the soft carry case for easy portability
- **Lens cleaning kit:** Supplied with lens cleaning cloth
- **Spectral Response:** Visible to .90 microns (IR)
- **Magnification:** X1
- **Resolution:** 0.68 (cycles per mrad)
- **System Gain:** minimum 2000 (fl/fl)

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OBJECTIVE LENS DATA

Focal Length x1 mag: 27mm
T Number: 1.2
F Number: 1.0
Focusing Range: 30cm to infinity

EYEPIECE LENS DATA

Effective Focal Length: 26mm
Diopter Adjustment: 6 to +2
Interpupillary Adjustment: 55-71mm
Photocathode Sensitivity: 550 $\mu\text{A/Lm}$
Luminance Gain Im/Im: 25000 35000
E.B.I : max 0,15 typ 0.8 μx
Resolution : min 45 lp/mm typ 57lp/mm
MTF: @ 2.5 lp/mm 92%
@ 7.5 lp/mm 70%
Signal to Noise Ratio: min 18
Reliability: 10000hrs
Shock Resistance: 500g`s

ENVIRONMENTAL

Low Tem Testing -51° C (7 Hours)
High Temp Testing 71° C (16 Hours)
Humidity Testing 120hrs @ 95 5% RH & 30° to 65°C
Vibration Testing 10-200HZ (2.5 G, 12mm Displacement
@ 3 axis for each axis 0,5 hrs
Waterproof Test: Leak test at 0.25 bar (25000 (kpa) and
immersion 0.5 hrs at 1 meter

LOGISTICAL SUPPORT

- Calibration equipment to test the image intensifier
For gain, resolution and general picture quality
- Calibration equipment for the complete system for
Resolution, gain and general picture quality.
- Ref for production and testing MIL N 49603