

PORTABLE PASSIVE NIGHT VISION DRIVER/INFANTRY GOGGLE SYSTEM

DB-302



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

Standard Accessories

- Head Mount Assembly: Allows hands-free operation with adjustments to accommodate the user's head size and eye position.
- Medium and thick brow pads: Has changeable pads to accommodate head sizes.
- Eye cups: To prevent the emission of stray light or facial reflections.
- Sacrificial window: Shields the objective lens from sand and dust or anything that may scratch the lens.
- Carry cases: Includes soft and hard carry cases.
- Shoulder strap: Attaches to the soft carry case for easy portability.
- Lens cleaning kit: Supplied with lens paper, brush and cleaning fluid

Spectral Response: Visible to .90 microns (IR)
Magnification: X1
Resolution: 0.68 (cycles per mrad)
System Gain: minimum 2000 (fl/fl)

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

Objective Lens Data

Focal Length x1 mag	27mm
T-Number	1.2
F-Number	1.0
Focussing range	30cm to infinity

Eyepiece Lens Data

Effective Focal Length	26mm
Diopter Adjustment	-6 to +2
Interpupilliary adjustment	55-71mm

IMAGE INTENSIFIER

Photocathode Sensitivity	Minimum 675 (typ) 700 μ A/lm (US eq 1820 μ A/lm)
Luminance Gain lm/lm	35000 - 55000
E.B.I	max 0,15 typ 0.8 μ x
Resolution	min 64 lp/mm
MTF @ 2.5 lp/mm	92%
@ 7.5 lp/mm	70%
Signal to Noise Ratio	min 21 typ 23
Reliability	10000hrs
Shock Resistance	500g`s

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

ENVIRONMENTAL

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|---------------------|--|
| - Low Tem Testing | -51° C (7 Hours) |
| - High Temp Testing | 71° C (16 Hours) |
| - Humidity Testing | 120hrs @ 95 \pm 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 o.5 hrs at 1 meter |