

HD-1520A-AUG GEN III

18 mm, Inverting image intensifier tube

Description

HDS-1520 series is 18mm, Gen III, inverting image intensifier tube producing green scenery image. It is a high-gain, high-photosensitivity image intensifier tube suitable for passive night vision systems and goggles.

The HDS-1520 consists of a high-efficiency (GaAs) extended red photo-cathode on an AVG glass input window; a micro-channel plate (MCP) current amplifier; and output Inverting fiber optic with P43 phosphor screen.

The HDS-1520 has a high-voltage power supply which incorporates (ABC) automatic brightness control to provide a constant output image brightness as light levels varies. The power supply also provides (BSP) bright source protection to guard the tube against exposure to high levels of light.

The HDS-1520 is completely self-contained image intensifier tube encapsulated within a hard-surface insulating sleeve.

Performance:

- Luminous Sensitivity at 2856°K min. 1800 $\mu\text{A}/\text{lm}$
- Radiant Sensitivity at 830 nm min. 190 mA/W
- Signal-to-Noise Ratio min. 25
- EBI ($10^{-11}\text{Im}/\text{cm}^2$) max. 2.5
- Luminous Gain at 2×10^{-6} fc 40,000 to 70,000 fl/fc
- Supply Current max. 32 mA
- Output Uniformity at 2856°K max. 3:1
- Limiting Resolution max. 64 lp/mm
- FOM min. 1600
- MTF at 2.5 lp/mm min. 92%
- 7.5 lp/mm min. 80%
- 15.0 lp/mm min. 61%
- Photocathode diameter min. 17.5 mm
- MTTF 10,000 hours



Picture quality table

(Maximum allowable spots in each zone)

Spot Size (microns)	I	II	III
401-500	0	0	0
301-400	0	0	0
231-300	0	0	0
151-230	0	1	1
75-150	1	2	2
<75	minimal		

All data and dimensions are for reference only. Subject to change without notice.

