

HD 1520A

Image intensifier

HD1520A is 18mm, inverting, Gen III image intensifier tube.

It is a high gain, high photosensitivity image intensifier tube suitable for passive night vision systems and goggles. The HD1520A consists of a high-efficiency (GaAs) extended red photo-cathode on a glass input window; a microchannel plate (MCP) current amplifier and an inverting fiber optic phosphor screen.

The HD1520A has a high voltage power supply which incorporates automatic brightness control (ABC) to provide a constant output image brightness as light levels varies. The power supply also provides bright source protection (BSP) to guard the tube against exposure to high levels of light.

The HD1520A is completely self-contained image intensifier tube encapsulated within a hard-surface insulating sleeve.

Performance	Unit	Min.	Max.
Cathode sensitivity 2856°K	μA/lm	1650	
	830 nm mA/W	160	
Signal-to-Noise ratio		21	
EBI	μlux		0.25
Luminous gain at 2×10^{-5} lux	Cd/m ² /lux	17000	22000
Supply current	mA		32
Output uniformity			3 : 1
Limiting resolution	lp/mm	64	
MTF at 2.5 lp/mm	%	90	
7.5 lp/mm	%	70	
15.0 lp/mm	%	45	
Photocathode diameter	mm	17.5	
MTTF	hours	10000	

Picture quality			
Size (μm)	I	II	III
381-500	0	0	0
301-380	0	0	0
231-300	0	0	1
150-230	1	1	2
70-150	1	4	6

