

HD 1400

Image intensifier

HD 1400 is image intensifier assembly, 25mm. Equivalent label XX2500.

HD 1400 consists of a single module containing a microchannel electron multiplier as the primary gain mechanism. The assembly employs an S25 photo-cathode with an extended red response, an aluminized phosphor and a power supply. The power supply operates in conjunction with an external gain control circuit. It 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 assembly is encapsulated within a hard surface insulating sleeve with electrical contact

Performance	Unit	Min.	Max.
Cathode sensitivity 2856°K	μA/lm	300	
	800 nm mA/W	20	
	850 nm mA/W	15	
Magnification		0.96	1.04
Signal-to-Noise ratio		3.2	
EBI	μlux		0.20
Luminous gain at 2×10^{-5} lux	Cd/m ² /lux	9600	23000
Supply current	mA		32
Output uniformity			2 : 1
Limiting resolution	lp/mm	32	
MTF at 2.5 lp/mm	%	90	
	7.5 lp/mm	%	60
	15 lp/mm	%	25
Photocathode diameter	mm	25	
MTTF	hours	2500	

Picture quality			
Size (μm)	I	II	III
381-500	0	0	0
301-380	0	1	2
231-300	0	3	6
150-230	1	6	10
70-150	3	15	20

