

M851-SS™ Image Intensifiers (MX-10160)

Gen III Night Vision Image Intensifier (I²) Tubes



*M851 I² tubes
are used in
L-3 EOS M983™
(AN/PVS-18)*



*M851 I² tubes
are used in
L-3 EOS M953™
(AN/PVS-15)*

The M851-SS Image Intensifiers are equivalent to the U.S. MX-10160 configuration.



BENEFITS:

- Gen III photocathode which is very sensitive to low levels of visible and near-infrared light
- Thin-filmed ion barrier to greatly extend Gen III I² tube life versus Gen II tubes
- 1400 and 1600 FOM exportable versions
- U.S. manufactured Generation III image intensifier (I²) tube

FEATURES:

- One year warranty standard
- Used in M983™ (AN/PVS-18) and M953™ (AN/PVS-15) night vision systems
- This Image Intensifier is equivalent to U.S. Military configuration MX-10160



M851-SS™ (MX-10160) I² TUBE TECHNICAL SPECIFICATIONS BY MODEL:

PERFORMANCE PARAMETERS	M851-SS1400™ (P/N 245095-SS1400)	M851-SS1600™ (P/N 245095-SS1600)				
FIGURE OF MERIT (FOM) FOM = SNR x RESOLUTION	1026 FOM (Min) 1400 FOM (Max)	1094 FOM (Min) 1600 FOM (Max)				
RESOLUTION (lp/mm)	57 (Min)	57 (Min)				
SIGNAL TO NOISE RATIO	18.0 (Min)	19.2 (Min)				
HALO mm	.85 (Min) to 1.25 (Max)	.85 (Min) to 1.25 (Max)				
PHOTOCATHODE SENSITIVITY 2856° K (µA/lm)	1200 (Min)	1500 (Min)				
PHOTOCATHODE SENSITIVITY at 880nm (mA/W)	72 (Min)	77 (Min)				
PHOTOCATHODE SENSITIVITY at 830nm (mA/W)	N/A	155 (Min)				
EBI (x10 ⁻¹¹ phot)	5.0 (Max)	5.0 (Max)				
LUMINANCE GAIN @ 2x10 ⁻⁴ fc (fl/fc)	40000 (Min) to 70000 (Max)	40000 (Min) to 70000 (Max)				
LUMINANCE GAIN @ 2x10 ⁻⁴ fc (fl/fc)	5000 (Min) to 20000 (Max)	10000 (Min) to 20000 (Max)				
OUTPUT BRIGHTNESS @ 1 and 20 fc (fl)	1.5 (Min) to 4.0 (Max)	2.0 (Min) to 4.0 (Max)				
RELIABILITY (HOURS)	10000	10000				
HIGH-LIGHT RESOLUTION @ 20 FC (LP/MM)						
MTF @2.5 LP/MM	86%	Info Only				
MTF @7.5 LP/MM	65%	Info Only				
MTF @ 15 LP/MM	35%	61%				
MTF @25.0 LP/MM	16%	38%				
MAXIMUM SPOTS ALLOWED IN EACH ZONE						
	Zone			Zone		
SPOT SIZE (IN.)	1	2	3	1	2	3
>.009 OR LARGER	0	0	0	0	0	0
>.006 - .009	0	1	2	0	1	2
>.003 - .006	0	2	3	0	2	3
BRIGHT SPOTS	0	0	0	0	0	0
INPUT OPTIC	Glass					
CATHODE TYPE	Gallium Arsenide					
PHOSPHOR	P43					
IMAGE OUTPUT	Inverting					
STANDARD TUBE WARRANTY	1 Year					

Specifications subject to change without notice

M851-SS (MX-10160) Oct 2010



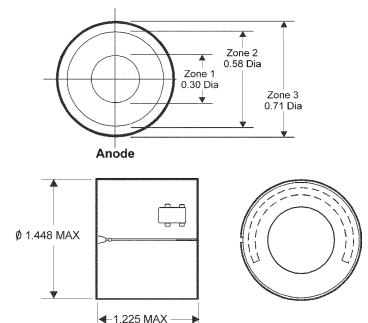
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Summit Night Vision Group is a U.S. Service-Disabled, Veteran-Owned Small Business.

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