



Infrared (IR) viewers

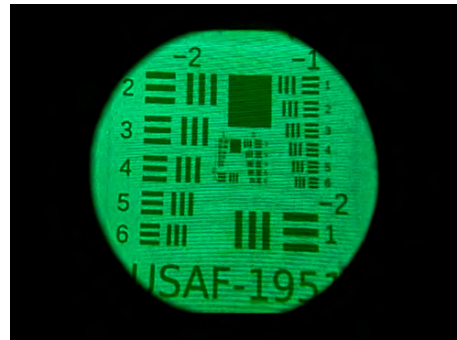
Main features

- Spectral region 350 - 2000 nm
- Resolution up to 60 Lp/mm
- Hand-held / post mounted
- Up to 60 hours battery life, chargeable
- Pulsed and CW light detection

Application examples

- Location and alignment of Nd: YAG Yb:YAG, Yb:KGW, Ti:Sapphire and other IR lasers
- Identification of stray IR reflections
- Observation of GaAs laser diodes, IR LED's, dye and other IR-sources
- Forensic analysis on inks, pigments

Digital version of IR viewer (DIG series) is based on multiphoton absorption (MPA) phenomenon when the wavelength of the laser exceeds the linear spectral detection range of the silicon material. In addition, the process of photoelectrons requires spatial and temporal filtering from noise to enhance the visualization of IR photons beyond the 1,1 μ m spectrum. By adjusting the gain on a pixel-by-pixel basis, it is possible to achieve imaging up to 1,7 μ m.



High performance image conversion infrared viewers (IC series) based on highgrade image converter are designed to observe indirect radiation of infrared laser, light emitting diodes (LED), dye and other IR-sources in 350-2000 nm spectral range. Infrared viewer is based on a first-generation high-grade image converter that has an electro-static focusing system, photocathode S-1+ with an increased concentration of oxygen and screen of type P-20 with the maximum of luminescence at 550 nm. Infrared viewer focus emitted or reflected light from a chosen object into the image tube where the electron image is generated. When powered the 16-18 kV voltage is generated to accelerate the electron image towards the phosphor screen at the output. The fluorescent green light output (550 nm) is observed via an adjustable eyepiece lens.

DIGITAL IR-VIEWER SPECIFICATION

	MODEL 1X	MODEL 2X
Spectral range	DIG1300 (400-1300 nm) DIG1700 (400-1700 nm)	
Field of view	38 deg	19 deg
Magnification	1X	2X
Objective lens	F1.3/8 mm	F1.4/16 mm
Focus	0.1m to infinity	0.5 (0,15m) to infinity
Resolution (center)	30 Lp/mm	
Distortion of image	0.5%	
Dimensions	175 x 207 x 51 mm	

IMAGE CONVERSION IR VIEWER SPECIFICATION

	MODEL 1X	MODEL 2X
Spectral range	IC1300 (350-1300 nm) IC1700 (350-1700 nm) IC2000 (350-2000 nm)	
Field of view	40 deg	20 deg
Magnification	1X	2X
Objective lens	F1.4/25 mm	F1.8/50 mm
Focus	0.1m to infinity	0.5 (0,15m) to infinity
Resolution (center)	up to 60 Lp/mm	
Distortion of image	20%	
Dimensions	153 x 173 x 51 mm	

Standard products

ITEM MODEL	SPECTRAL SENSITIVITY	FIELD OF VIEW	MAGNIFICATION	OBJECTIVE LENS	SKU
IC1300-1	350-1300 nm	40°	1X	F1.4/25 mm	up to 60 hours 35829
IC1700-1	350-1700 nm	40°	1X	F1.4/25 mm	up to 60 hours 35837
IC2000-1	350-2000 nm	40°	1X	F1.4/25 mm	up to 60 hours 35838
IC1300-2	350-1300 nm	20°	2X	F1.8/50 mm	up to 60 hours 35839
IC1700-2	350-1700 nm	20°	2X	F1.8/50 mm	up to 60 hours 35840
IC2000-2	350-2000 nm	20°	2X	F1.8/50 mm	up to 60 hours 35841
DIG1300-1	400-1300 nm	38°	1X	F1.3/8 mm	9 hours 35842
DIG1300-2	400-1300 nm	19°	2X	F1.4/16 mm	9 hours 35843
DIG1700-1	400-1700 nm	38°	1X	F1.3/8 mm	9 hours 35844
DIG1700-2	400-1700 nm	19°	2X	F1.4/16 mm	9 hours 35845

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