

IRV Series Infrared Viewers



Newport's IR viewers are designed to observe radiation emitted by infrared laser or laser diode light sources that can't be seen with the naked eye. They use a first generation high-grade image converter that has an electro-static focusing system, photocathode S-1+ with increased concentration of oxygen and screen of type P-20 with maximum of luminescence at 550nm.

An electron image is generated in the image tube from the emitted light where the viewer is focused. When powered (with battery or power supply) the 16-18 kV voltage is generated required to accelerate the electron image into the output phosphor screen. The fluorescent green light output (550 nm) is observed via an adjustable eyepiece lens.

Applications

- Laser alignment
- Semiconductors inspection
- Forensics and art restoration
- Photo processing
- Thermal imaging



IRV Series Infrared Viewers

Models	IRV1-1700	IRV1-2000	IRV2-1300	IRV2-1700	IRV2-2000
Wavelength Range	350-1700nm	350-2000 nm	350-1300 nm	350-1700 nm	350-2000 nm
Field of View	25°	25°	(1x lens) 40°, (2x lens) 18°	(1x lens) 40°, (2x lens) 18°	(1x lens) 40°, (2x lens) 18°
Focus Range	0.15 m to infinity	0.15 m to infinity	0.15 m to infinity (1x lens), 0.5m to infinity (2x lens)	0.15 m to infinity (1x lens), 0.5m to infinity (2x lens)	0.15 m to infinity (1x lens), 0.5m to infinity (2x lens)
Magnification	1.8X	1.8X	1X or 2X	1X or 2X	1X or 2X
Resolution	50 l/mm	50 l/mm	60 l/mm	60 l/mm	60 l/mm
Damage Threshold	10 mW/cm ²	10 mW/cm ²	110 mW/cm ²	10 mW/cm ²	10 mW/cm ²
Battery	2 x LR44	2 x LR44	1 x AAA	1 x AAA	1 x AAA
Battery Life	18 hours	18 hours	35 hours	35 hours	35 hours
Operating Temperature	-10 to 40° C	-10 to 40° C	-10 to 40° C	-10 to 40° C	-10 to 40° C
Dimensions	135 x 65 x 43 mm	135 x 65 x 43 mm	220 x 78 x 55 mm	220 x 78 x 55 mm	220 x 78 x 55 mm
Weight	0.25 kg	0.25 kg	0.58 kg	0.58 kg	0.58 kg

Compare

Description



IRV-ID
Iris Diaphragm, Infrared Viewer, IRV1 1.4x and IRV2 1x Lenses



RV-HB
Face Mask Headband, Infrared Viewers, Hands-Off Operation



IRV-CA
CCD Camera Adapter, IRV2 Viewers



IRV-ND
Neutral Density Filter, 3.5% Transmission at 1064 nm



IRV-MA
Microscope Adapter, IRV Series Viewer