



IRonEye LRF Datasheet



Thermal Camera Specifications:

Resolution:	640 x 480p (VGA)
Sensor:	uncooled Vanadium Oxide Microbolometer
Thermal Sensitivity (NETD):	≤ 35 mK
Pixel Pitch:	12 µm
Spectral Range:	8 µm – 14 µm
Thermography Calibration:	-10° to 120°C
Measurement Accuracy:	+/- 2°C
Frame Rate:	60 Hz
Optics:	31° HFOV (14mm), 50° HFOV (9.2mm), 86° HFOV (5.5mm)
Non-Uniformity Correction:	mechanical shutter-based NUC

Physical Specifications:

Length:	10,0 cm
Width:	6,2 cm
Height:	4,2 cm
Weight:	200 g
Mounting:	1/4"-20 UNC thread on top and bottom
Operating Temperature:	-35° to 75°C
Protection Rating:	IP67
Housing Material:	Aluminum EN AW-6061
Housing Finish:	hard anodized and scratch-resistant ceramic-coated
Protective Window:	Germanium with DLC and HEAR Coating

Laser Range Finder Specifications:

Wavelength:	1,5 µm
Lasser Classification (IEC 60825-1:2014):	Laser class 1
Measuring Range:	10 – 8000 m
Measuring Mode:	Continuous (1 – 25 Hz)
Detection Range:	NATO Standard Target (2,3 × 2,3 m, Albedo 50%, 25 km Visibility): 3300m Small Target (0,75m x 0,75m, Albedo 30%, 25 km Visibility): 2100
Multiple Target Discrimination:	≤ 25 m
Output:	Embedded in USB UVC video feed or over UART
Control Interface:	UART-RS232 exposed via USB

Connectivity & Software:

Connector:	Hardened USB-C connector with push pull
Output:	MJPEG, YUV 4:2:2 (uncompressed, 30 fps), H.264
Power Consumption:	< 1W

Control Interface:	UART-RS232 exposed via USB
Operating Voltage:	5 V DC
Software Features:	Digital Zoom (1-8x), Thermal Filters, Thermography (SDK), Outline Mode (SDK)
Operating System (SDK):	Windows, Linux
Processor Architecture (SDK):	ARM64 or x86_64