

Irley™ Specifications



Thermal Imaging

	Standard Sensor	High-Resolution Sensor
Thermal Resolution	382 x 288 pixels	640 x 480 pixels
Spectral Range	8–14 μ m	
Thermal Sensitivity (NETD)	50 mK	80 mK
Temperature Ranges*	-20°C to 100°C (-4°F to 212°F) 0°C to 250°C (32°F to 482°F) 150°C to 900°C (302°F to 1652°F)	
Optics (Lens / FOV)	18° x 14° (20 mm) 29° x 22° (12.7 mm) 53° x 38° (7.7 mm) 80° x 54° (5.7 mm)	22° x 17° (20 mm) 36° x 26° (12.7 mm) 65° x 45° (7.7 mm)
Frame Rate	27 - 80 Hz (Configurable)	32 Hz
Focus	Motorized Auto Focus	
Accuracy	$\pm$ 2°C or $\pm$ 2%, whichever is greater	

Detection, Monitoring & Analysis

Measurement Regions	Spot, Line, Box, Polygon, Exclusion
Measurement Statistics	Minimum, Average, Maximum, Delta, Sum
Advanced Analytics	Standard Deviation (σ), Nonuniformity (σ /avg $\times$ 100%)
Thermal Palette Controls	Automatic and Manual Palette Scaling
Intelligent Hot Spot Detection	Filters moving objects and monitors for developing hot spots

Notifications & Reporting

Alert Severity Levels	Information, Low, Medium, High
Notification Methods	Voice Call, Text Message, Email
Multi-User Notifications	Yes
Notification Schedules	Schedule notification recipients by day, time, and alarm severity
Notification Templates	Custom voice, text, and email messages for alarm and recovery events
Event Reporting	Automated reports with timelines, trend graphs, and thermal snapshots

Mechanical & Environmental

Enclosure Material	Anodized Aluminum
Protection Rating	IP66 / IP67
Indoor / Outdoor Use	Both
Dimensions	11 x 4 x 4 in (279 x 102 x 102 mm)
Weight	4.7 lb (2.1 kg)
Operating Temperature	0°C to 60°C
Ambient Operating Temperature	0°C to 50°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5% to 90%, non-condensing

Electrical & Hardware

Input Voltage	12 VDC
Power Consumption (Nominal)	15 W
Power Consumption (Maximum)	30 W
Power Connector	M8 3-pin connector
Memory	4 GB DDR4 (8 GB Optional)
Storage	Up to 64 GB Internal eMMC Storage

Connectivity

LTE Connectivity	Yes
Ethernet	M12 Ethernet Connector
Cellular Antennas	Dual LTE Antennas (Diversity)
Satellite / Starlink	Supported
Monitoring Access	Local & Cloud Monitoring

Packaging

Package Dimensions	18 x 7.5 x 6 in (457 x 191 x 152 mm)
Shipping Weight	7 lb (3.2 kg)