

QL-FireVision 640

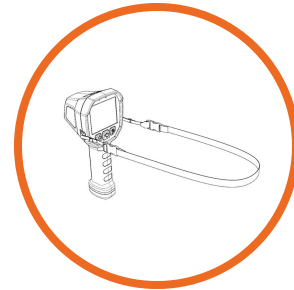
QUAKELOGIC

HANDHELD THERMAL IMAGING CAMERA



QL-FireVision 640

Handheld Thermal Imaging Camera



640×512 HANDHELD THERMAL IMAGING FOR FIRE AND RESCUE

The QuakeLogic QL-FireVision 640 is a handheld thermal imaging camera for firefighting, search and rescue, and thermal inspection. A native 640 × 512 uncooled infrared detector, 60 Hz frame rate, and 3.5-inch display support heat-source identification in low-visibility environments. Multiple imaging modes, temperature tracking, digital zoom, and photo/video recording add operational flexibility, while an IP67 enclosure, 2-meter drop resistance, and removable batteries support demanding field use.

- Native 640 × 512 infrared resolution and a 60 fps frame rate support detailed thermal imaging of changing scenes.
- IP67 sealing, 2-meter drop resistance, and documented high-temperature endurance let crews operate the camera directly in hazardous fireground conditions.
- Center-point, hot-spot, and cold-spot tracking with an on-screen scale delivers quantitative temperature readings for assessment and inspection.
- Two removable batteries with over 5 hours of runtime each and a 16 GB SD card support extended field documentation.

STANDARD FEATURES »

- Two Rechargeable Batteries
- Battery Charger
- U.S. Power Adapter
- 16 GB SD Card
- English Manuals
- One-Year Limited Warranty

Key Features

- Uncooled long-wave infrared detector at 640 × 512 native resolution provides high thermal detail for identifying heat sources in smoke and darkness.
- A 60 fps frame rate supports smooth thermal imaging of changing fire scenes and moving targets.
- Nine imaging modes including firefighting, search and rescue, white hot, black hot, and visible light adapt the display to each task.
- Automatic gain switching between high- and low-gain modes keeps scenes usable across the full -40°C to +1,200°C measurement range.
- Temperature measurement with center-point readout plus hot- and cold-spot tracking gives crews quantitative data for thermal assessment.
- 2× and 4× digital zoom brings distant heat sources and structural detail closer without changing position.
- Background non-uniformity correction operates without display blackouts or frozen frames, maintaining a continuous image during use.
- Selectable person and structural edge highlighting sharpens victim detection and structural awareness in cluttered scenes.
- JPEG photo and MP4 video recording to a 16 GB SD card documents incidents, transferred via USB-C or card reader.

PRODUCT FEATURES

Detector

Uncooled long-wave infrared detector · 640 × 512 native resolution · 8–14 μm spectral range · 60 fps frame rate

Display

3.5-inch TFT, 640 × 480 pixels · 60 Hz refresh rate · Automatic and manual brightness

Temperature Measurement

Range -40°C to +1,200°C · ±2°C up to 100°C; ±2% above 100°C · Center-point, hot- and cold-spot tracking · On-screen temperature scale

Imaging & Processing

Nine selectable imaging modes · Automatic high/low gain switching · 2× and 4× digital zoom · Edge highlighting and non-uniformity correction

Recording & Transfer

JPEG photo, MP4 video · 16 GB SD card storage · USB-C or card-reader transfer

Enclosure & Environment

IP67 ingress protection · 2-meter drop resistance · Operating -20°C to +60°C

Power

Removable rechargeable lithium-ion battery · More than 5 hours runtime per battery · Approximately 4-hour charge time

For more information about the features, specifications, and available configurations of the QL-FireVision 640, please contact QuakeLogic.

TECHNICAL SPECIFICATIONS

SPECIFICATION	DESCRIPTION
Model	QuakeLogic QL-FireVision 640
Detector Type	Uncooled long-wave infrared
Native IR Resolution	640 × 512 pixels
Spectral Range	8–14 μm
Frame Rate	60 fps
Display	3.5 in TFT, 640 × 480 px
Display Refresh	60 Hz
Display Brightness	Automatic and manual
Field of View	$\geq 48^\circ \text{H} \times 37^\circ \text{V}$ (supplier-stated)
Temp. Measurement Range	-40°C to $+1,200^\circ\text{C}$
Temp. Accuracy	$\pm 2^\circ\text{C} \leq 100^\circ\text{C}$; $\pm 2\% > 100^\circ\text{C}$
Gain Control	Automatic high/low switching
Imaging Modes	9 modes incl. white/black hot, visible
Temperature Indication	Center-point, hot/cold tracking, scale
Digital Zoom	2× and 4×
Edge Highlighting	Person and structural (selectable)
Image Correction	Background non-uniformity, no blackout

SPECIFICATION	DESCRIPTION
Photo Format	JPEG
Video Format	MP4
Storage	16 GB SD card
Data Transfer	USB-C or card reader
Ingress Protection	IP67
Drop Resistance	6.6 ft (2 m)
Operating Temperature	-20°C to $+60^\circ\text{C}$
Storage Temperature	-40°C to $+70^\circ\text{C}$
High-Temp Endurance	$80^\circ\text{C}/30 \text{ min}$; $120^\circ\text{C}/10 \text{ min}$; $150^\circ\text{C}/10 \text{ min}$; $260^\circ\text{C}/5 \text{ min}$
Battery Type	Removable rechargeable Li-ion
Operating Time	>5 hours per battery
Charging Time	Approx. 4 hours
Included Batteries	Two rechargeable batteries
Charging Accessories	Charger + 120 VAC 60 Hz U.S. adapter
Dimensions	10.2 × 4.7 × 4.5 in (260 × 120 × 115 mm) $\pm 5 \text{ mm}$
Weight	1.98 lb (900 g) $\pm 50 \text{ g}$, incl. battery
Warranty	One-year limited

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About QuakeLogic:

QuakeLogic Inc. is a California-based engineering and technology company providing innovative, reliable, high-quality solutions to customers worldwide.

Our Commitment

We are committed to quality, innovation, and customer satisfaction – building lasting partnerships through reliable solutions and dependable support.

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