

## the halo™

### The worlds first hands-free thermal imaging camera.

A game changer for the industry, The Halo™ gives you the freedom for versatility in hostile environments with its patentable technology; it's the future of firefighting.

The Halo™ hands-free camera is the smallest and lightest camera built for firefighting and search and rescue. The ability to attach the camera to a fire fighters helmet gives the user huge versatility, giving the freedom to use both hands combined with crystal clear images in a hazardous environment.

Whether you're searching for casualties or firefighting, The Halo™ is an unbeatable tool to suit both situations.

A 2.5" HD screen mounted from the body of the camera, gives a great reference point when needed. Developed with an internal lithium ion battery, it offers a working duration of 10 hours before re-charging is required. At 390g The Halo™ is without doubt, the lightest thermal imaging camera available today.

When temperature is important to the wearer, then we have available spot temperature measurement with 4 colour maps, with single button configuration making for easy operation.

Positioning The Halo™ on the side of a helmet gives excellent viewing ability, but it's not limited to just that one location. It can be clipped onto a tunic, utilised with a lanyard, used within the hand and also mounted on a colleagues helmet quickly for sharing information.



- ✓ The smallest and lightest thermal imaging camera in the world
- ✓ 390g including battery
- ✓ 10 hours battery life
- ✓ 2.5" high definition display
- ✓ Snap shot function with image freezing for situation assessment
- ✓ Superior dynamic range
- ✓ Unique shutter scanning awareness





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## Technical Specifications

### Mechanical Data

Camera Dims (HxWxD)	60mm x 70mm x 125mm
Camera Weight	390g with battery
Main Camera Body	Radel® R-5100 and Santoprene®
Display Window	Lexan® CTGXT Anti fog coated polycarbonate

### Compliance Data

Emissions EMC	BS EN 61000-6-3:2007
Immunity	EN61000-6-2:2005

### Optical Data

Sensor Type	Uncooled Microbolometer with Digital Processing, Pixel Smoothing
Resolution	160 x 120 array
Sensing Material	Amorphous Silicon (aSi)
Spectral Response	7.5 - 14 Microns
Thermal Stabilization	-40°F to 175°F (-40°C to 85°C)
Update Rate	30HZ
Video Output	NTSC
Thermal Sensitivity	<50mK / <0.05°C
Dynamique Range	1100°F (600°C) Nominal
Pixel Size	30µm
Thermal Time Constant	10ms
Video Polarity	White-Hot, Black-Hot Selectable
Relative Heat Indicator	Sliding Bar Scale, temperature to colour relationship and temperature readout
Super Red Hot	Colour above 500°F

### Lens

Lens Material	Germanium – Diamond hard high effective anti reflection coating
Focal Length	1m to infinity, optimised at 4m (3ft to infinity, optimised at 13ft)
Lens Size	16mm
Field Of View	37.5° Vertical x 50° Horizontal
Focus Fixed	3 feet (1 metre) to infinity
Aperture	f / 1.0

### Electrical Data

Power Consumption	3.7V 650mAh
Start Up Time	5 Seconds Typical
Battery Type	Li-ion Rechargeable Battery
Std Battery Life	10 Hours @ ambient temperatures (22°C, 72°F)
Std Battery Charge Time	Less than 2 hours
Std Battery Charging Temp	5°C to 40°C (41°F to 104°F)
Charger Input Voltage	5V 1.0 AMP
Charger Operating Temp	0°C to 40 °C (32°F to 104°F)
Battery Rechargeable Cycles	Over 1000 charge cycles
Battery Weight	80g

### Display

Type	2.5" High Definition Screen
Dot Pitch	188mm (V) x 160mm (H)
Dot Format	640 x 480 Dots
Display Method	NTSC
Back Light	LED
Brightness	400 cd/m²
Viewing Angle	51°
Zoom	none as standard

### Environmental Data

Thermal Conditions	The camera has been designed to operate: Continuously between -20°C (-4°) and 85°C (185 °F) or 150°C (300°F) for 15 minutes 260°C (500°F) for 7 minutes
Sealing	IP67, will withstand short-term immersion in water
Impact	The camera will withstand a drop from a height of 2m (78 inches) on to concrete
Storage	It is recommended that for maximum effective operational life, the storage temperature is kept between -20°C (-4°F) and +40°C (104°F)
Warranty	24 month warranty as standard (exclusions apply)