



iFalconHM

Helmet Mounted Thermal Imaging System

RESCUER OF THE FUTURE **SUPERIORITY IN FIREFIGHTING**

SCBA USE WITH THERMAL VIEW

REAL-TIME COMMUNICATION

HANDS FREE OPERATIONS

REMOTE MONITORING

NO EYE-STRAIN

CHEMICAL & NUCLEAR SENSING

Patented in EU, US and China

iFalconHM-Lite

is an Integrated Electronic Safety Equipment (ESE) that enhances intervention time, room navigation, and air consumption.

256x192 pixels - 8.0-14.0um
Thermal Sensor microbolometer

Display TFT 5.0" RGB
800x480 pixels
High Definition Details View

LED illuminator

5 buttons for
an easy usability
of all functions

Swappable Rechargeable
Battery



TECHNICAL SPECIFICATIONS:	iFalconHM-Lite
Material:	Flame Retardant Radel® Carbon Fiber with flame retardant resins
Sealing:	IP68
Dimensions:	450x180x285mm (LxWxH)
Weight:	1,40kg (3,08lb)
Thermal Detector resolution:	256x192 pixels, uncooled microbolometer
Sensitivity:	High Sensitivity 50mK (typical)
Spectral Response:	8.0-14.0 microns
Lens and Protective Window Material:	Germanium
Field of View:	56° H; 42°V;
Frame Rate:	25Hz or 30Hz
Visible Camera Detector:	Unavailable
Display Size and Resolution:	TFT 5.0" RGB, 800x480pixels
Laser Pointer and LED Lighting:	Included
Battery:	Li-Ion Intrinsically Safe
Mission Life:	>2h
Zoom Capacity:	2x
Selectable Color Palette	
LED Light Illuminator	

TECHNICAL SPECIFICATIONS:	iFalconHM-Lite
Long Range Wireless Communication:	Unavailable
Image Storage:	Unavailable
Video and Audio Storage:	Unavailable
Environment:	-20°C to 85°C (-4°F to 185°F) 150°C (302°F): 15 min 260°C (500°F): 5 min
Warranty:	2 Years
Approvals:	CE Marking CEI EN 60068-2-1 CEI EN 60068-2-2 CEI EN 60068-2-31 ETSI EN 301 489-1, ETSI EN 301 489-3 CEI EN 60529
Compliant with standard EN443	

iFalconHM-Full

the first thermal imaging system with real-time, high-power wireless video and data transmission.

640x512 pixels - 7.5-13.5um

Thermal Sensor microbolometer

Display TFT 5.0" RGB

800x480 pixels

High Definition Details View

Visible Camera (CMOS sensor)

Laser pointer

LED illuminator

**5 buttons for easy access
to all functions**

**Swappable Rechargeable
Battery**

**Wireless - 2.4GHz 2x2 MIMO
Mesh Operation Long Range**

**Global Navigation
Satellite System GNSS**

**Compatible headsets:
CeoTronics, Savox,
Holmco, Imtradex**

**Integrated Montionless and Lying
body detection**

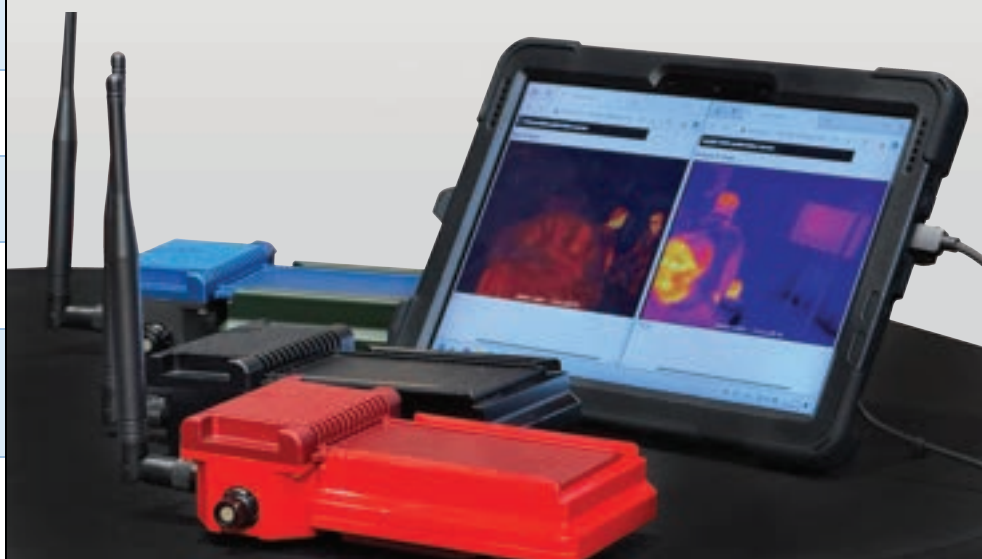
TECHNICAL SPECIFICATIONS	iFalconHM-Full
Material:	Flame retardant Radel® Carbon Fiber with flame retardant resins
Sealing:	IP68
Dimensions:	450x180x285mm (LxWxH)
Weight:	1,5kg (3,30lb)
Thermal Detector Resolution:	640x512 pixels, uncooled microbolometer
Sensitivity:	High Sensitivity 20mK (typical)
Spectral Response:	7.5-13.5 microns
Lens and Protective Window Material:	Germanium
Field of View:	50° H; 40°V;
Frame Rate:	50Hz or 60Hz
Visible Detector:	CMOS
Display Size and resolution:	TFT 5.0" RGB, 800x480pixels
Laser Pointer and LED Lighting:	Included
Battery:	Li-Ion Intrinsically safe
Mission Life:	>2h (only thermal); >40min (all on)
Zoom Capacity:	2x/4x/8x
Selectable color palette	12 palettes
LED Light Illuminator	
Compass	
Motionless body detection	
Lying-pose human detection	

TECHNICAL SPECIFICATIONS:	iFalconHM-Full
Long Range Wireless Communication:	Frequency: 2.402 - 2.478 GHz Modulation: BPSK, QPSK Robust 2X2 MIMO 2.4 GHz Operation MESH Rx Sensitivity: -102dBm Tx Output Power: 30dBm (1W) Encryption: 128-bit AES Alternative frequency available as option
Video and Audio Storage:	80 hours minimum Format MPEG 4 - H264
Environment:	-20°C to 85°C (-4°F to 185°F) 150°C (302°F): 15 min 260°C (500°F): 5 min
Warranty:	2 Years
Approvals:	CE Marking CEI EN 60068-2-1 CEI EN 60068-2-2 CEI EN 60068-2-31 ETSI EN 301 489-1, ETSI EN 301 489-3 CEI EN 60529
Compliant with standard EN443	
MIL-STD-810H (pending)	
Multiple Wireless frequencies for communication redundancy	

iFalconNET

iFalconNET repeaters establish a reliable communication network, transmitting video and data remotely to any device

TECHNICAL SPECIFICATIONS	iFalconNET
Communication:	Frequency: 2.402 - 2.478 GHz Modulation: BPSK, QPSK Robust 2X2 MIMO 2.4 GHz Operation MESH Rx Sensitivity: -102dBm Tx Output Power: 30dBm (1W) Encryption: 128-bit AES Alternative frequency available as option
Environmental	- Weight: 0.55kg (1.20lb)(including battery) - Sealing: IP68 - Intrinsically safe Li-Ion battery >28Wh for mission operation > 5h
Operating temperature:	176°F (80°C)>60 minutes 248°F (120°C)>30 minutes 392°F (200°C)>15 minutes -40°F (-40°C)>25 minutes
Housing and Construction:	Flame retardant Radel® and Anodized aluminum Color: Grey or other requested at the order
Approvals:	CE Marking CEI EN 60068-2-1 CEI EN 60068-2-2 CEI EN 60068-2-31 ETSI EN 301 489-1, ETSI EN 301 489-3 CEI EN 60529
Included:	- 1 iFalconNET-900 REPEATER - 1 External Li-Ion Battery for iFalconHP - 1 EL-BT-CRG-WP: Wall Plug Battery Charger - 1 Ethernet cable



Repeaters positioned on the spot
Build mobile network infrastructure on-site

Video and data transmission
Ensure clear communication during field operations

Network monitoring
Avoid audio noise and provide on-screen instructions

Areas of application

Mines and Tunnels

High return facilities

Search and Rescue

Hose handling



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