



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



ENERGY LASER
Focusing Innovations

iFalconHM-Lite

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

384x288 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:	1,35kg (including battery)
Thermal Detector resolution:	384x288 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
Video and Audio Storage:	48 hours minimum format MPEG4 – H264
Environment:	–20°C to 85°C (–4°F to 185°F) > 60 minutes 150°C (302°F): 15 min 260°C (500°F): 5 min
Warranty:	2 Years
Approvals:	CE Marking IP68
Compliant with standard EN443	

iFalconHM-Lite PRO

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

**384x288 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 PRO
Material:		Flame Retardant Radel® Carbon Fiber with flame retardant resins
Sealing:		IP68
Dimensions:		450x180x285mm (LxWxH)
Weight:		1,35kg (including battery)
Thermal Detector resolution:		384x288 pixels, uncooled microbolometer
Sensitivity:		High Sensitivity 50mK (typical)
Spectral Response:		8.0-14.0 microns
Lens and Protective Window Material:		Germanium
Field of View:		39° H; 30°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:		4x
Selectable Color Palette		
LED Light Illuminator		

TECHNICAL SPECIFICATIONS:		iFalconHM-Lite PRO
Short Range wireless Data (no video):		Frequency 2.400-2.4835 GHz, with Radio Operation 802.11b/g/n Sensitivity -89dBm Output power 20dBm
Video and Audio storage:		48 hours minimum format MPEG4 – H264
Environment:		-20°C to 85°C (-4°F to 185°F) > 60 minutes 150°C (302°F): 15 min 260°C (500°F): 5 min
Warranty:		2 Years
Approvals:		CE Marking IP68
Compliant with standard EN443		
Includes iFalconAPP-Lite		
Temperature accuracy: +/-10°C		

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 Motionless and Lying
body detection**

TECHNICAL SPECIFICATIONS	iFalconHM-Full
Material:	Flame retardant Radel® Carbon Fiber with flame retardant resins
Sealing:	IP68
Dimensions:	450x180x285mm (LxWxH)
Weight:	1,65kg (including battery)
Thermal Detector Resolution:	RADIOMETRIC, 640x512 pixels, uncooled microbolometer
Sensitivity:	High Sensitivity 50mK (typical)
Spectral Response:	7.5-13.5 microns
Lens and Protective Window Material:	Germanium
Field of View:	48° H; 38°V;
Frame Rate:	50Hz or 60Hz
Visible Detector:	CMOS sensor 640x480, 0,025lux, 30Hz
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	10 palettes
LED Light Illuminator	
Compass	
Motionless body detection	
Lying-pose human detection	

TECHNICAL SPECIFICATIONS:	iFalconHM-Full
Long Range wireless Video and Data:	Selectable between: Frequency 2.400-2.4835 GHz, with Radio Operation 802.11b/g/n Sensitivity -92dBm Output power 30dBm Or Frequency 2.402-2.478 GHz, with Modulation BPSK or QPSK MIMO 2x2 Sensitivity -102dBm Output power 30dBm Data Encryption 128-bit AES
Video and Audio Storage:	48 hours minimum Format MPEG 4 - H264
Environment:	-20°C to 85°C (-4°F to 185°F) > 60 minutes 150°C (302°F): 15 min 260°C (500°F): 5 min
Warranty:	2 years
Approvals:	CE Marking IP68
Compliant with standard EN443	
Temperature accuracy: +/-10°C	
Multiple Wireless frequencies for communication redundancy	
Included iFalconAPP-FULL	
Possibility to visualize Video in Real time from other selectable iFalconHM	

iFalconHM-MIL

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**

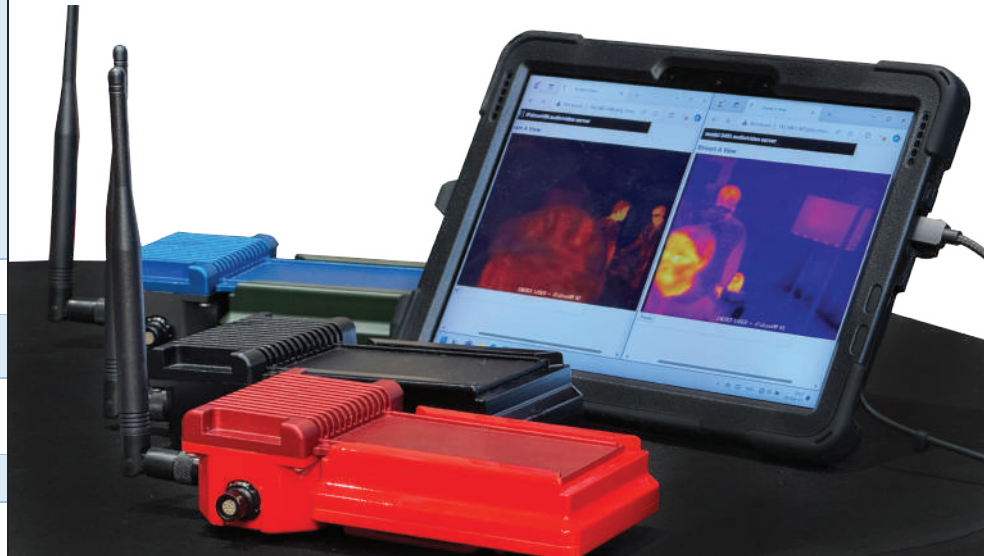
TECHNICAL SPECIFICATIONS	iFalconHM-MIL
Material:	Flame retardant Radel® Carbon Fiber with flame retardant resins
Sealing:	IP68
Dimensions:	450x180x285mm (LxWxH)
Weight:	1,65kg (including battery)
Thermal Detector Resolution:	RADIOMETRIC, 640x512 pixels, uncooled microbolometer
Sensitivity:	High Sensitivity 40mK (typical)
Spectral Response:	7.5-13.5 microns
Lens and Protective Window Material:	Germanium
Field of View:	50° H; 37°V;
Frame Rate:	50Hz or 60Hz
Visible Detector:	CMOS sensor 640x480, 0,025lux, 30Hz
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-MIL
Long Range wireless Video and Data:	Selectable between: Frequency 2.400-2.4835 GHz, with Radio Operation 802.11b/g/n Sensitivity -92dBm Output power 30dBm Or Frequency 2.402-2.478 GHz, with Modulation BPSK or QPSK MIMO 2x2 Sensitivity -102dBm Output power 30dBm Data Encryption 128-bit AES
Video and Audio Storage:	48 hours minimum Format MPEG 4 - H264
Environment:	-20°C to 85°C (-4°F to 185°F) > 60 minutes 150°C (302°F): 15 min 260°C (500°F): 5 min
Warranty:	2 years
Approvals:	MIL-STD-810H (High Temperature, Salt Fog) IP68
Compliant with standard EN443	
Temperature accuracy: +/-10°C	
Multiple Wireless frequencies for communication redundancy	
Included iFalconAPP-FULL	
Possibility to visualize Video in Real time from other selectable iFalconHM	

iFalconNET

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

TECHNICAL SPECIFICATIONS	iFalconNET
Communication:	Wireless Specifications: Transceiver Long Range (up to 500m in free space) Frequency: 2.400-2.4835 GHz, with Radio Operation 802.11b/g/n Sensitivity-92dBm Output power 30dBm Data Encryptions 128-bit AES or Wireless Specifications: Transceiver Long Range (up to 1000m in free space) Frequency: 2.402 - 2.478 GHz, with Modulation BPSK or QPSK MIMO 2x2 Sensitivity-102dBm Output power 30dBm Data Encryptions 128-bit AES
Environmental:	Weight: 1.0kg (including battery) Sealing: IP68
Operating temperature:	-20°C to 85°C > 60 minutes 150°C: 15 minutes 260°C: 5 minutes
Housing and Construction:	Flame retardant Radel® and Anodized aluminum Color: Grey or other requested
Approvals:	CE Marking IP68
Included:	1 REPEATER 1 External Li-Ion Battery for iFalconNET 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



ifalcon.eu



TikTok



YouTube



Instagram



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