

**INFRAHEX**





**INFRAHEX**  
The stealth textile

# Catalogue



# The New Battlefield

Warfare has changed  
due to newly used:



UAVs



Standard, FPV & fiber optic drones



Thermal optics



Satellites to observe targets

Traditional camouflage is no longer sufficient. In modern combat, **survivability depends on remaining undetectable until the last possible moment.**



# InfraHex – Thermal detection solved

- Infrahex is a functional fabric co engineered to conceal thermal signatures emitted by both living and non-living objects.
- Tested by NATO-aligned special units.
- Patent application No. - PV 2024-253

Black Hot



*Images captured by DJI Mavic 3T with thermal imaging at 40m.*

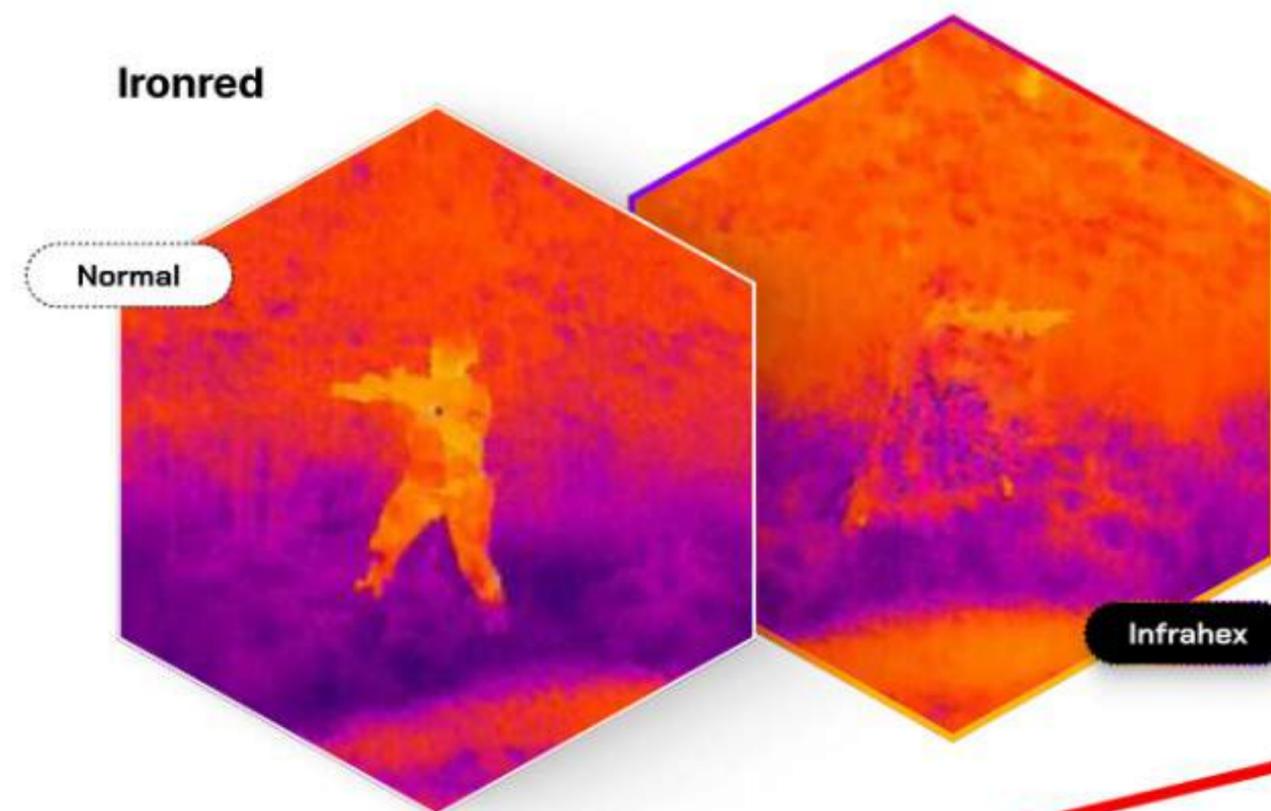
# InfraHex – The problem of potential thermal and EMF detection solved.

Infrahex is a functional fabric designed to conceal thermal signatures and electromagnetic signals emitted by both living and non-living objects.

## Vision



## Infrared

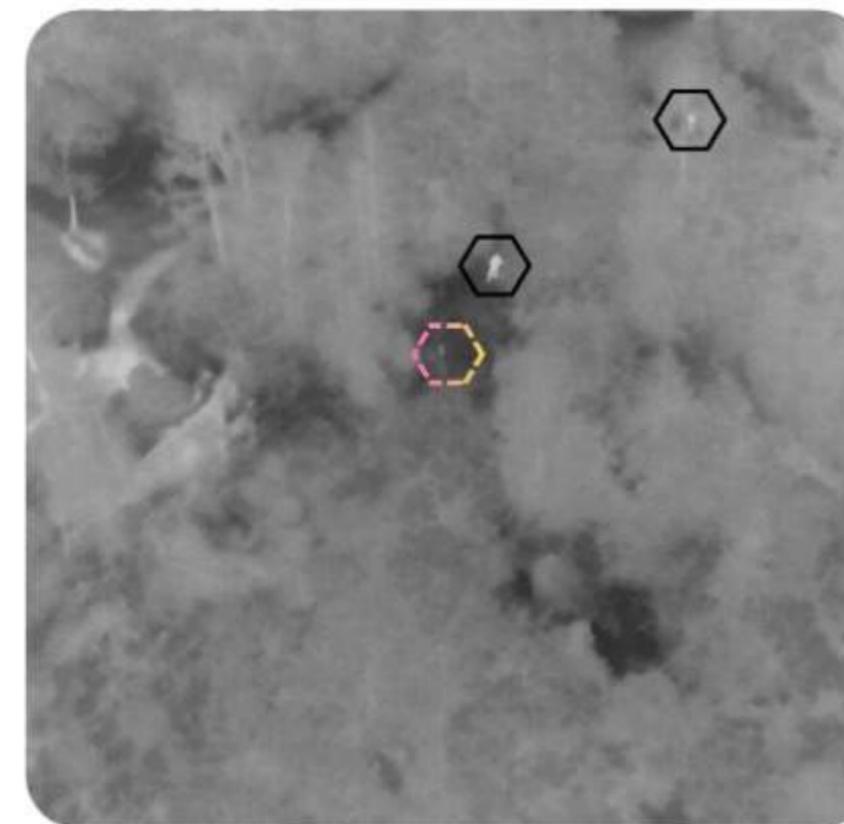


Images captured by DJI Mavic 3T with thermal imaging at 40m.

**COMBAT PROVEN**

## Combat Proven

- Infrahex has been combat - tested in real-world operations, including the war in Ukraine.
- Tested by NATO-aligned special units.
- Engineered for warfighters in drone-saturated combat zones.



▶ Watch video

# Characteristics of InfraHex

## InfraHex Advantages for Personnel

- ◆ **Thermal concealment**  
blocks enemy thermal scans & UAV surveillance
- ◆ **Night vision optimized**  
modulated to reduce visibility under NVG systems
- ◆ **Lightweight & breathable**  
comfortable for long missions, no overheating
- ◆ **Modular design**  
adaptable for different terrains, integrates with existing gear
- ◆ **Durable & weather-resistant**  
water-repellent, built for extremes
- ◆ **Silent movement**  
optimized for stealth approach
- ◆ **Combat-proven**  
tested by NATO units, refined by operator feedback
- ◆ **Confidence in the field**  
operators focus on mission, not survival



# Competitive Edge

No material on the market matches our **Infrahex performance**

## COMPETITION COMPARISON CHART

### RATING

0 = very negative

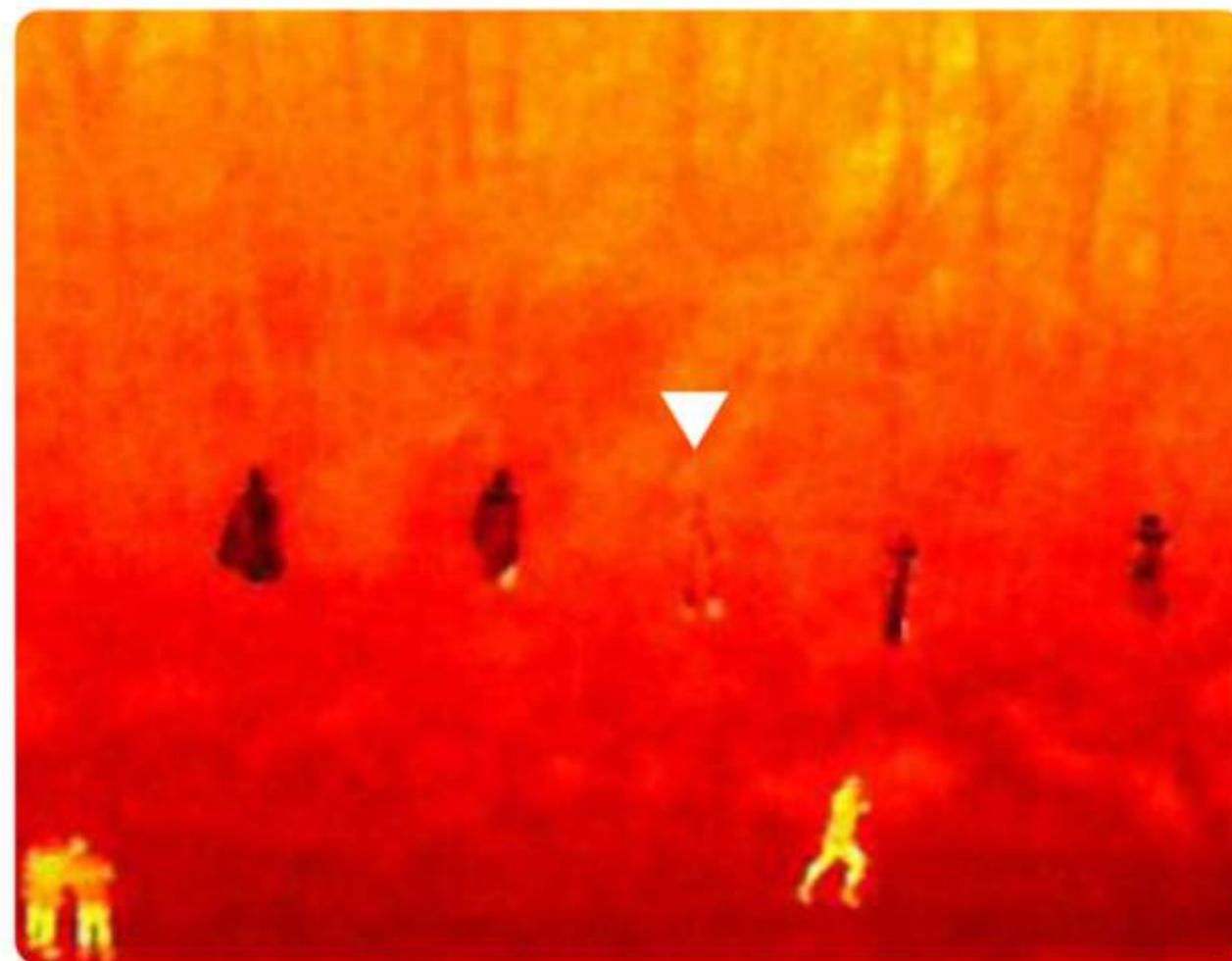
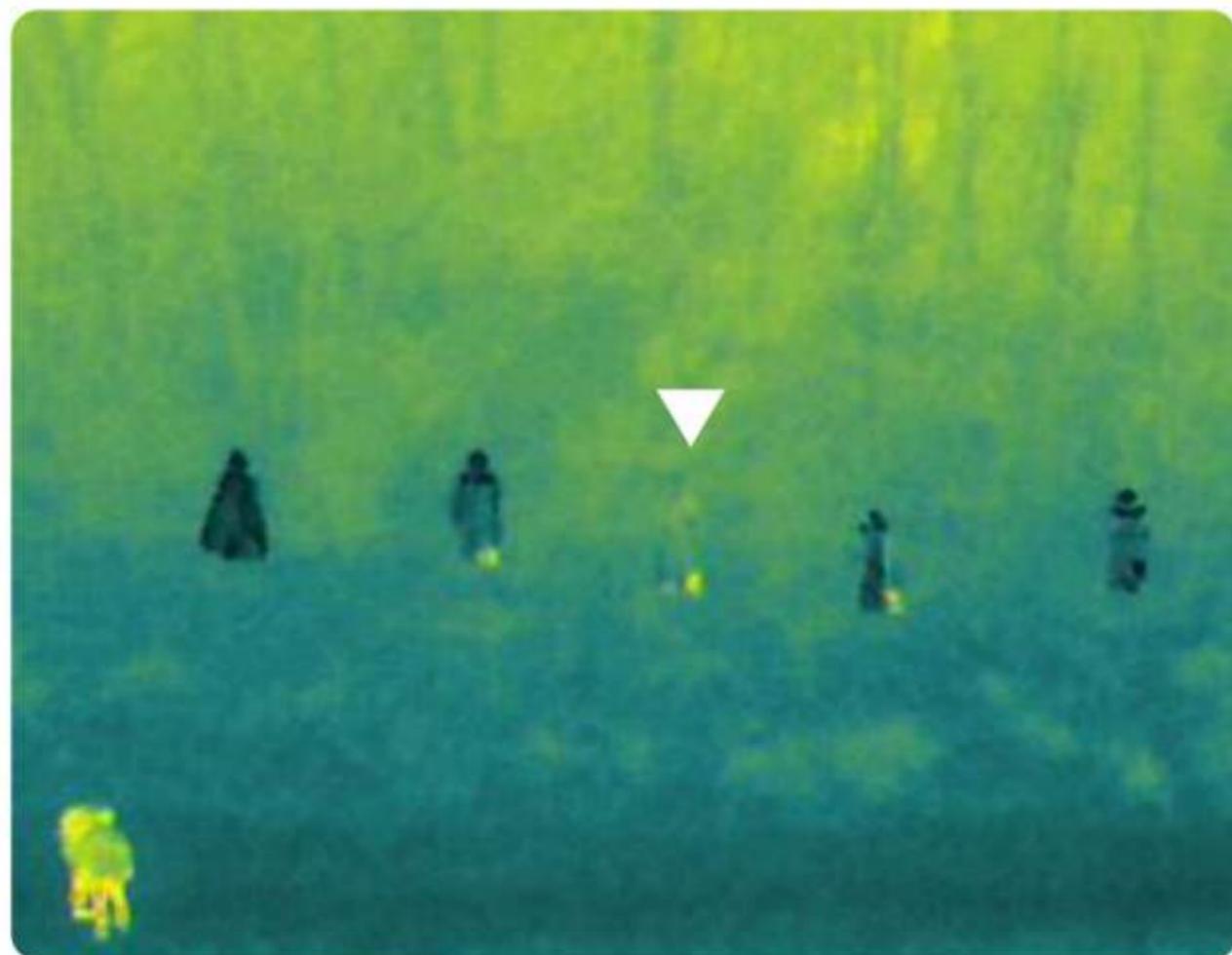
5 = very positive

N/D = No Data are rated as 4 points

Maximum possible points reached: 50

Camo cloak	Infrahex Ghille	Competitor IT	Competitor DE	Competitor IL	Competitor SE	Competitor USA	Competitor PL	Competitor UK	Competitor CN
Thermal detection after 40 min	5	N/D = 4	2	5	1	1	5	2	3
Thermal detection when wet	5	5	N/D = 4	2	N/D = 4	N/D = 4	1	2	2
Water resistance	4	1	1	5	0	5	1	2	1
Fabric RET	4	2	2	0	2	1	4	4	5
Cooling/venting	4	4	5	0	4	1	4	3	4
EMF Shielding	5	0	0	2	0	0	0	2	3
Fire retardancy	2	4	3	5	4	4	3	2	2
Cloak weight	5	2	5	1	3	1	2	3	5
Printed designs	2	3	3	4	3	5	4	4	2
User comfort	5	3	5	1	3	1	2	4	4
<b>Total points</b>	<b>41</b>	28	30	25	24	23	26	28	31

## Tests after 40 min of activity



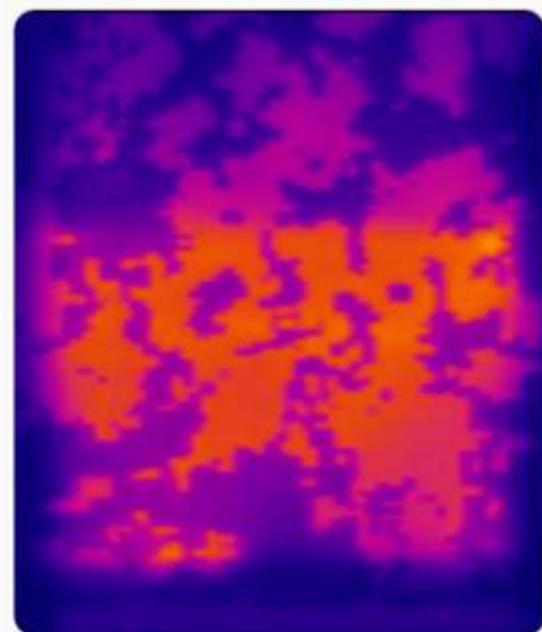
**INFRAHEX**

in direct contact with a heat source of 80 °C.

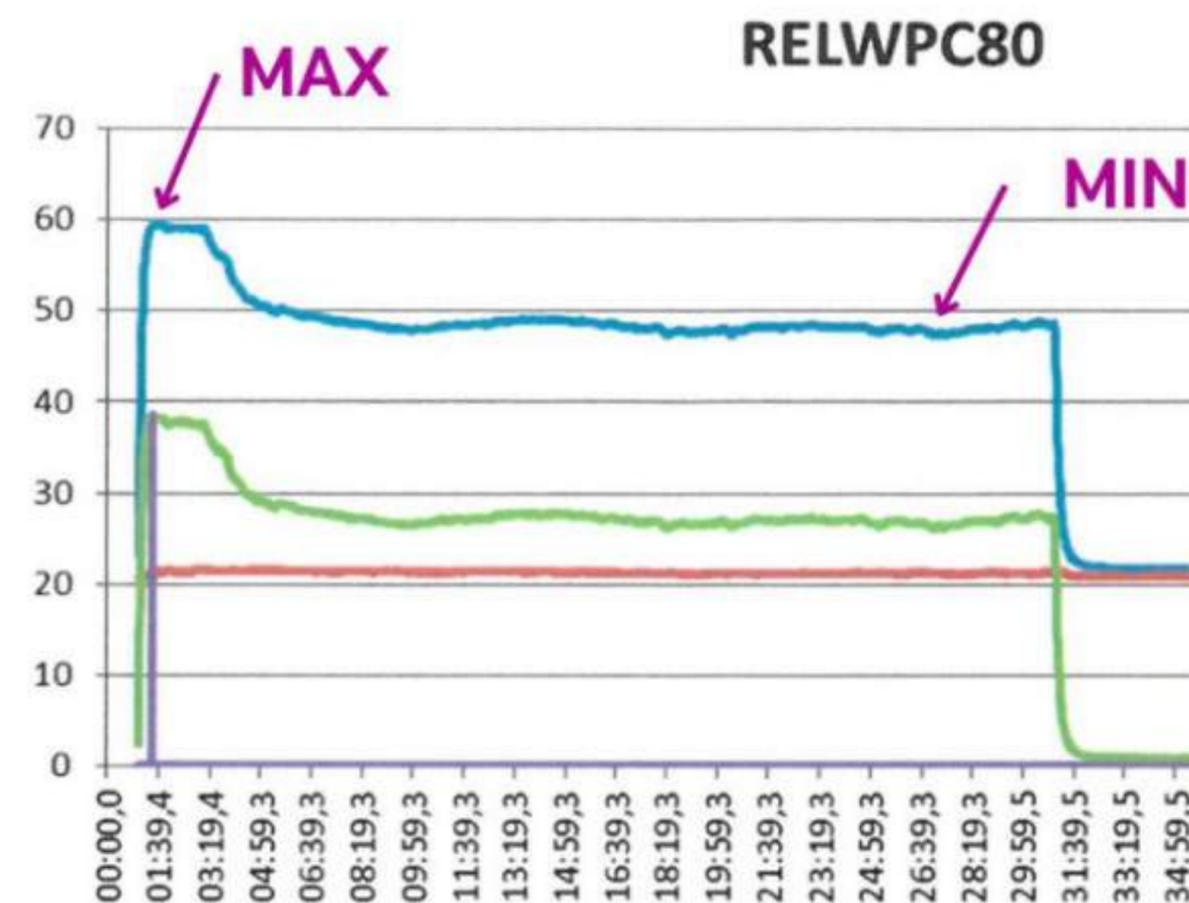
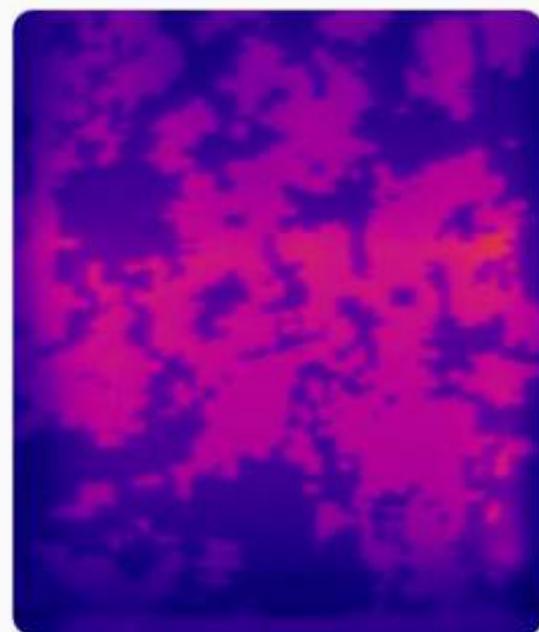
Long wave (8–20 μm) infrared signal

Thermal camera sensitivity 0,2 °C.

MAX: 01:39 = 59,69 °C



MIN: 27:15 = 47,30 °C



Prototype laboratory tests conducted by Vojenský výzkumný ústav, s. p.  
(Military Research Institute of Czech Republic)

# Testimonials

## Ukrainian army

“We tested the set under both open and forested conditions, and overall it performed very well. The camouflage is lightweight, quiet, and easy to use, with strong thermal protection. While some heat signatures remain visible on the face and footwear, in kneeling or prone positions, the target was nearly impossible to detect, especially beyond 70 meters. For stationary, use the results are excellent, and even in limited movement scenarios the effectiveness is clear. On a ten-point scale, I would rate this system 8 out of 10.”

## Military Police

“During our tests, the poncho provided excellent concealment when viewed through the JIM COMPACT thermal imager, blending well with the surroundings at medium and long distances, and requiring a skilled operator to detect the target. Paradoxically, when using the older TIGIR 6M device, the person was even easier to spot than through the JIM COMPACT. In vegetation, however, the Ghillie version proved to be clearly more effective than the poncho, as its irregular 3D patterns broke up the outline and enhanced concealment.”

## Border control, NATO country

“Field trials in sub-zero, near-Arctic conditions—Snowy plains with little vegetation—showed the poncho version to be more effective than the Ghillie suit. At observation distances beyond 50 meters, whether from ground-based optics or drone platforms, a stationary subject was extremely difficult to detect. While moving movement, the figure could still be noticed, though only as a faint ‘shadow-like’ trace against the background. For operations involving skis or snowmobiles, a full-body oversuit design with trousers and a longer parka would likely provide even better concealment and practicality.”

## InfraHex Products

- InfraPoncho
- InfraGhillie
- InfraTarp
- InfraBivy
- SupCover
- InfraScrim
- Intel Chesty
- Intel Pouch
- Intel Bag





MWIR,  
LWIR & NIR  
compliant



With  
or without  
a helmet



Neck gaitor



Leg gaitors

# InfraPoncho

Universal poncho/cloak designed to reduce NIR and thermal signatures, adapting to the surrounding environment.

- 96% thermal signature reduction
- Waterproof and windproof
- Can be used as a tent or covering tarp
- Designed to maintain the ability to access magazines and weapons when worn
- Stored in a fast-opening MOLLE pocket

COLORS	WEIGHT	PACKAGE	ORDER DELIVERY
● Khaki	1,3 kg	Poncho	< 1,000 pcs – 15 weeks
● Digital Camo		Leg Gaitor	
● Desert		Neck Gaitor	< 20,000 pcs – 30 weeks
		MOLLE Bag	

## InfraPoncho - specification



**MWIR,  
LWIR & NIR  
compliant**

**With  
or without  
a helmet**

**Neck gaitor**

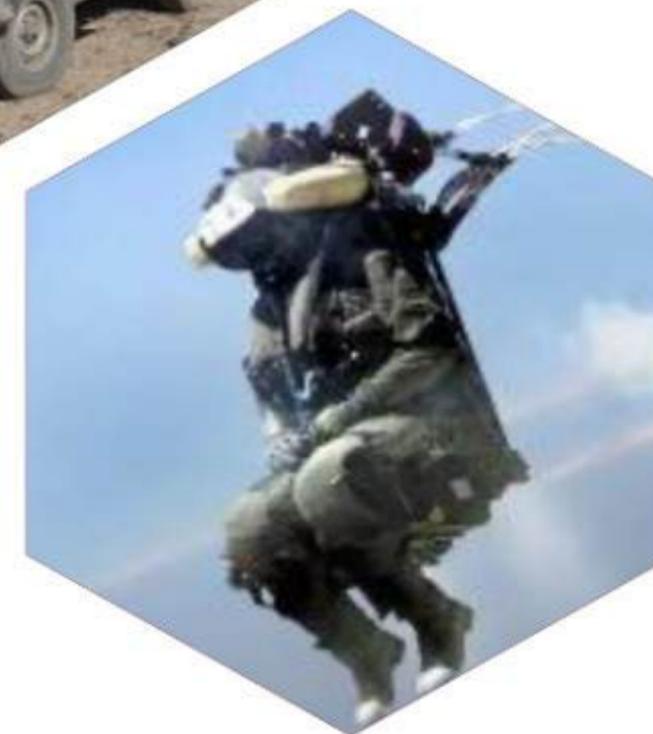
**Leg gaitors**

Parameter	Value	Norm
Areal weight	125 ± 5 gsm	ASTM D 3776
Thickness	0.25 mm	ISO 9073-2
Thermal signature reduction	> 96% (0.5-20 um)	
Hydrostatic resistance	10,000 mm ± 15 %	AATCC 127
RET	5.5 m <sup>2</sup> .Pa/W ± 10 %	ISO 11092
Breathability	0.7 cfm ± 10 %	ASTM D 737
EMF shielding efficacy	min. 40 dB	ASTM D4935
Product weight	1.5 kg ± 10 %	
Product dimensions	12 × 26 × 15 cm	

# InfraPoncho Field Deployment Scenarios

Enhances the concealment of ejected pilots against enemy thermal tracking, increasing the probability of survival behind enemy lines.

Enhances concealment of dismounted personnel in urban terrain against enemy thermal tracking, increasing the likelihood of survival and successful evasion in hostile areas



# InfraGhillie

Universal poncho/cloak designed to reduce NIR and thermal signatures, adapting to the surrounding environment.

- 96% thermal signature reduction
- Waterproof and wind proof
- Silent
- Can be used as a tent or covering tarp
- Designed to keep ability of managing magazines and guns once dressed
- Customizable foliage design
- Storage in fast opening MOLLE pocket

COLORS	WEIGHT	PACKAGE	ORDER DELIVERY
● Khaki	2000 g	Poncho	< 1,000 pcs – 15 weeks
● Digital Camo		Leg Gaitor	
● Desert		Neck Gaitor	< 20,000 pcs – 30 weeks
		MOLLE Bag	



MWIR,  
LWIR & NIR  
compliant



With  
or without  
a helmet



Neck Gaitor



Leg Gaitor

## InfraGhillie - specification



MWIR,  
LWIR & NIR  
compliant



With  
or without  
a helmet



Neck Gaitor



Leg Gaitor

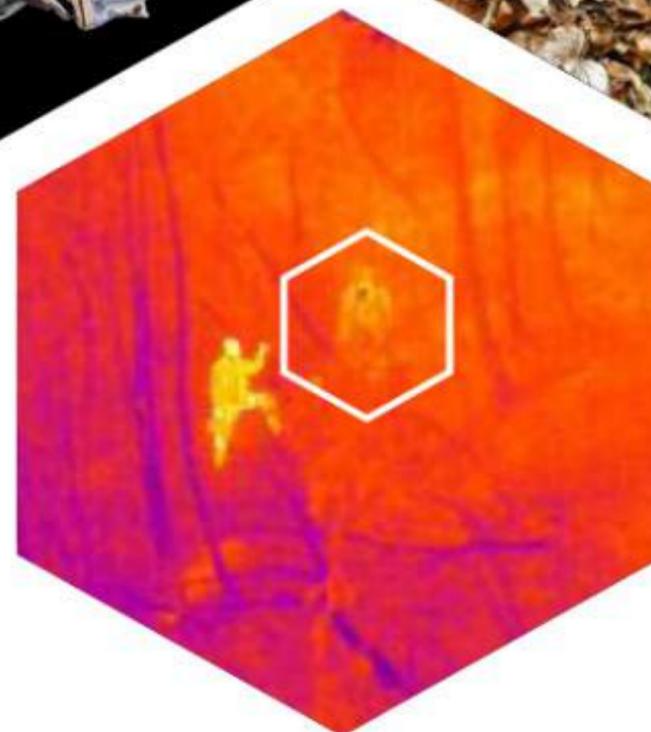
Parameter	Value	Norm
Areal weight	125 ± 5 gsm	ASTM D 3776
Thickness	0.25 mm	ISO 9073-2
Thermal signature reduction	> 96% (0.5-20 um)	
Hydrostatic resistance	10,000 mm ± 15 %	AATCC 127
RET	5.5 m <sup>2</sup> .Pa/W ± 10 %	ISO 11092
Breathability	0.7 cfm ± 10 %	ASTM D 737
EMF shielding efficacy	min. 40 dB	ASTM D4935
Product weight	2.2 kg ± 10 %	
Product dimensions	12 × 26 × 15 cm	

# InfraGhillie Suit Field Deployment Scenarios

InfraHex enables special forces to approach high-risk objectives under thermal and EM surveillance, undetected until the moment of contact.

Helps snipers remain thermally concealed during approach and overwatch, increasing the chance of undetected observation and precise engagement.

Ghillie enables drone operators to stay hidden from enemy thermal sensors during operation.



# InfraTarp

Universal tarp with the ability to reduce NIR and thermal signatures of hidden persons and heated equipment to neutral level according to blend with the environment.

- 96% thermal signature reduction
- Waterproof and windproof
- Can be used as a tent
- Loops to attach natural vegetation or adaptive camouflage materials
- A sizes comes with 20 m and B sizes with 50 m tent cord
- Best overall performance with camo net

## COLORS

- Khaki
- Digital Camo
- Desert

## SIZE & WEIGHT

- A) Universal Tarp 3×3 m – 1.500 g
- B) SUV Tarp 5×8 m – 5.900 g

## ORDER DELIVERY

- < 1,000 pcs – 15 weeks
- < 5,000 pcs – 30 weeks



MWIR,  
LWIR & NIR  
compliant



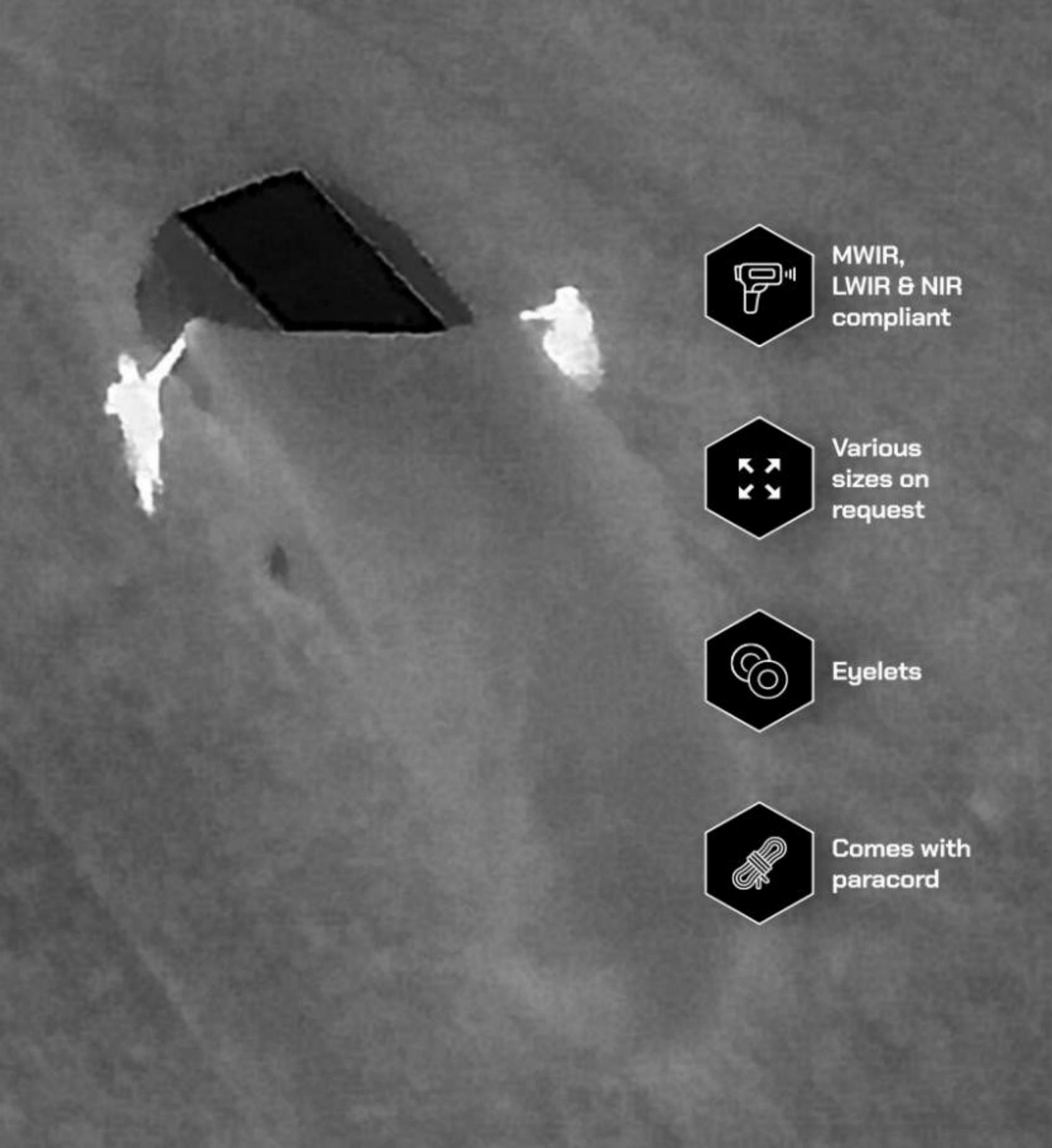
Various  
sizes on  
request



Eyelets



Comes with  
paracord



## InfraTarp - specification



MWIR,  
LWIR & NIR  
compliant



Various  
sizes on  
request



Eyelets



Comes with  
paracord

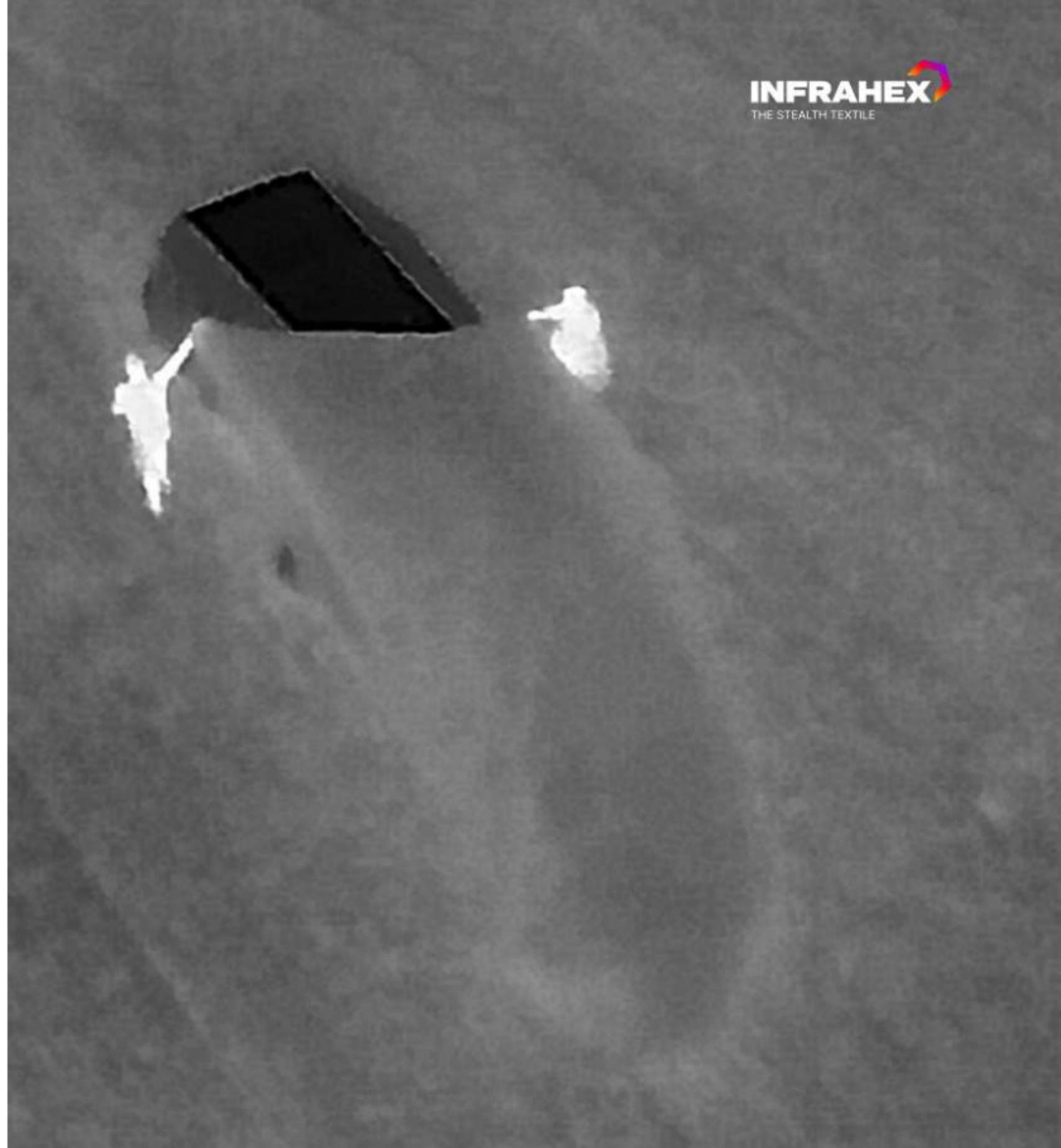
Parameter	Value	Norm
Areal weight	170 ± 5 gsm	ASTM D 3776
Thickness	0.25 mm ± 10 %	ISO 9073-2
Thermal signature reduction	> 96% (0.5-20 um)	
Hydrostatic resistance	12,000 mm ± 10 %	AATCC 127
RET	6 m <sup>2</sup> .Pa/W ± 10 %	ISO 11092
Breathability	0.5 cfm ± 10 %	ASTM D 737
EMF shielding efficacy	min. 40 dB	ASTM D4935
Product dimensions	3 × 3 m 30 × 25 × 25 cm	8 × 5 m 50 × 30 × 25 cm

# Field Deployment Scenarios

## InfraTarp

**Multispectral Concealment for Military Vehicles and Strategic Assets as machine gun positions, heavy weapon systems, electronic equipment shelters, and more**

Universal tarp with the ability to reduce NIR and thermal signatures of hidden heated equipment to neutral level according to environment.



# InfraBivy

Universal Bivy Bag to reduce NIR and thermal signatures of the user to a neutral level relative to the environment. Invisible shelter for elite forces in the most hostile environments.

- Ultralight & packable under 1 kg
- Full IR concealment (MWIR, LWIR & NIR)
- Works even when wet or in high humidity
- Ready in less than 2 minutes
- Breathable and condensation-resistant
- Resists burn-through from hot embers
- Window protected by mosquito net
- Available in enhanced EMF shielding version (shielding min. 70 dB)

## COLORS

- Khaki
- Digital Camo

## SIZE & WEIGHT

0.9 × 2.3 m - 950g

## LOAD CAPACITY

140 kg

## ORDER DELIVERY

- < 1,000 pcs – 15 weeks
- < 5,000 pcs – 30 weeks



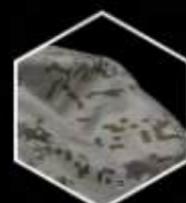
MWIR,  
LWIR & NIR  
compliant



Mosquito net



Waterproof zipper



Lightweight  
& Durable



## InfraBivy - specification

Parameter	Value	Norm
Areal weight	170 ± 5 gsm	ASTM D 3776
Thickness	0.25 mm ± 10 %	ISO 9073-2
Thermal signature reduction	> 96% (0.5-20 um)	
Hydrostatic resistance - topcoat	10,000 mm ± 10 %	AATCC 127
Hydrostatic resistance - floor	16,000 mm ± 10 %	AATCC 127
RET	5.5 m <sup>2</sup> .Pa/W ± 10 %	ISO 11092
Breathability	0.7 cfm ± 10 %	ASTM D 737
EMF shielding efficacy	min. 40 dB	ASTM D4935
Product dimensions	xxx	xxx



MWIR,  
LWIR & NIR  
compliant



Mosquito net



Waterproof zipper



Lightweight  
& Durable

# Field Deployment Scenarios

## InfraBivy

Rapid-deploy multispectral shelter for soldiers in exposed positions, enabling instant NIR/MWIR/LWIR concealment during reconnaissance, evasion, or overwatch missions. Designed for emergency hide sites where operators must remain undetected by drones, thermal imagers, and ground sensors.



# SupCover

Reduces thermal signatures of heated gun parts up to 350 °C, preventing detection by thermal imaging systems as they blend with the ambient temperature.

- 90% thermal signature reduction
- Mechanically resistant
- Designed as a one-size-fits-all solution for rifles
- At least 5 consecutive sets of 30-round magazines

## COLORS

- Khaki
- Digital Camo
- Desert

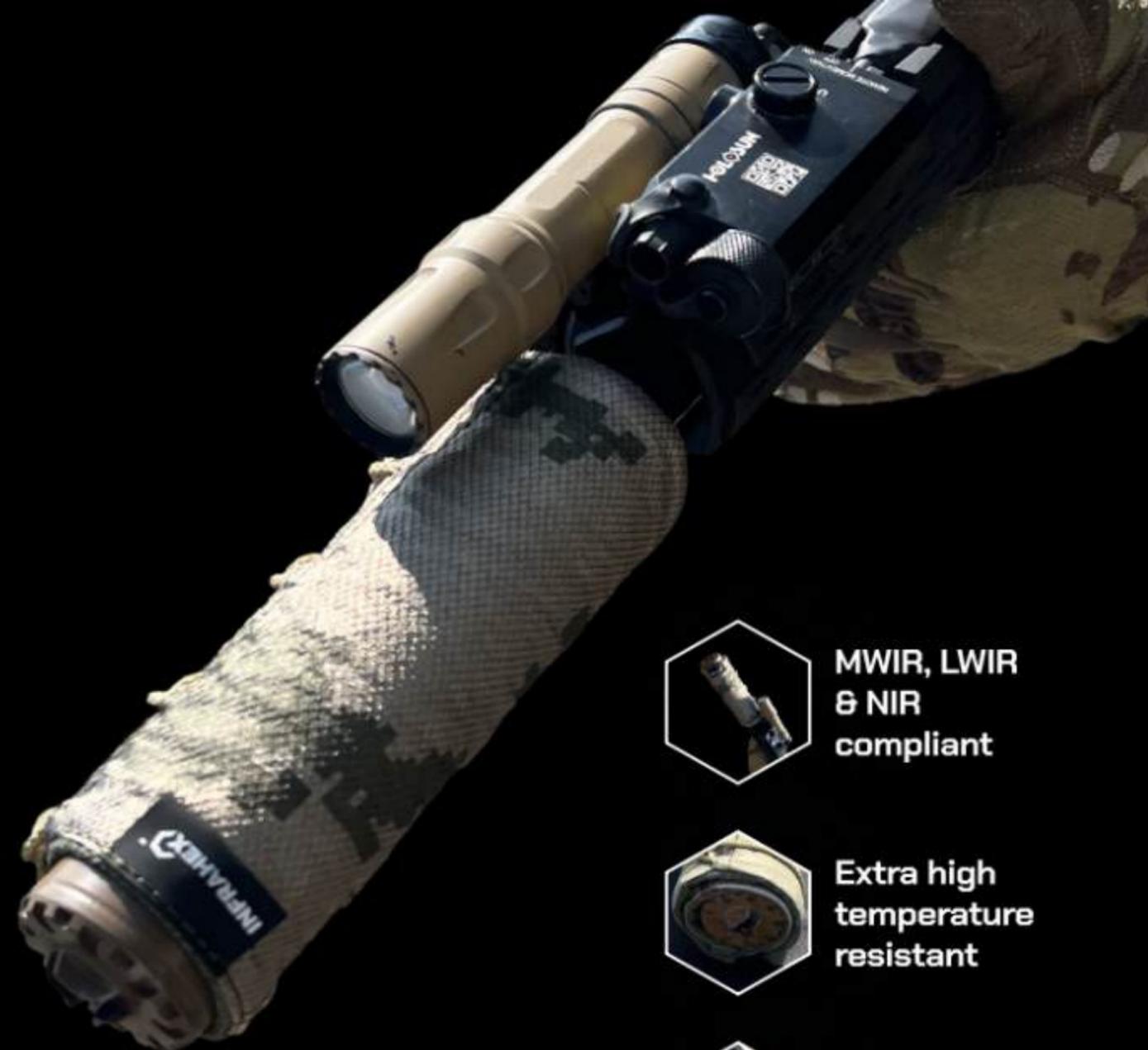
## SIZE & WEIGHT

0.2 × 1 m - 150 g

## ORDER DELIVERY

< 1,000 pcs - 7 weeks

< 20,000 pcs - 14 weeks



MWIR, LWIR  
& NIR  
compliant



Extra high  
temperature  
resistant



Easy to put  
on & off



NATO  
standard  
compliant

# SupCover family - overview & specification

Parameter	SupSleeve	SupCover Ti	InfraScrim
Suppressor cover type	Overcoat	Metal cup	Masking scrim
Function	Multispectral sleeve applied to third party suppressor covers	Multispectral suppressor cover with enhanced ventilation made of titanium alloys and InfraHex.	Stripes of InfraHex utilized for masking of the firearm muzzle.
Thermal signature reduction	> 90% (0.5-20 um)	> 96% (0.5-20 um)	> 90% (0.5-20 um)
Thermal insulation	Low	High	Low
Maximal use temperature	150°C*	1000°C	150°C*
Weight	< 150 g	< 500 g	< 7 g

▶ Watch video



*\*Not for direct contact with suppressor surface*

# SupCover Mission-Based Deployment Scenario

## Key Benefits

- Withstands heat from 5–8 magazines in active combat without failure
- Remains invisible to thermal optics after firing 2+ magazines
- Suppresses IR signature of hot suppressors — no glowing tube = no detection
- Durable, combat-tested, modular design
- Compatible with multiple suppressor types as .223 / 5.56 to .50 platforms
- Patent pending





## Intel product family

The protective pouch made of InfraHex material for those who value privacy and invisibility. It blocks all signals from 500 MHz upwards and above, ensuring complete digital and physical protection.

- 100% signal blocking from 500 MHz (mobile - GPRS, EDGE, 3G, 4G, 5G, WiFi 2.4 & 5 GHz, Bluetooth 5.3, RFID )
- Shields from eavesdropping and remote hacking
- One-size-fits-most mobile phones
- Shields crypto wallets, car keys, and contactless payment cards
- Easy attachment with Velcro and MOLLE system
- Ideal for tactical missions, business meetings, or everyday use



# Intel family - overview & specification

Parameter	Intel Pouch Camo	Intel Pouch Black	Intel Chesty	Intel Bag
Fuction	Tactical shielding of mobile phones	General use shielding of mobile phones, car keys	Tactical shielding of mobile phones	Reusable dry intel collection bag
EMF shielding (EN xxx)	80 - 110 dB	80 - 110 dB	80 - 110 dB	90 - 110 dB
Blocked networks	>99.999% signal blocking for GPRS, EDGE, 3G, 4G, 5G, WiFi 2.4 & 5 GHz, Bluetooth 5.3, RFID	>99.999% signal blocking for GPRS, EDGE, 3G, 4G, 5G, WiFi 2.4 & 5 GHz, Bluetooth 5.3, RFID	>99.999% signal blocking for GPRS, EDGE, 3G, 4G, 5G, WiFi 2.4 & 5 GHz, Bluetooth 5.3, RFID	>99.999% signal blocking for GPRS, EDGE, 3G, 4G, 5G, WiFi 2.4 & 5 GHz, Bluetooth 5.3, RFID
Waterproofness	Rainproof	Rainproof	Rainproof	Watertight
Weight	35g	38g	165g	30 L - 975g 50 L - 1230g
Product dimensions	170 × 100 × 10mm	170 × 100 × 10mm	170 × 120 × 25mm	30L - 420 × 550 × 350mm 50L - 500 × 750 × 450mm
Package dimensions	180 × 115 × 15mm	180 × 115 × 15mm	170 × 120 × 35mm	???

# Intel Pouch

The protective pouch made of InfraHex material for those who value privacy and invisibility. It blocks all signals from 500 MHz upwards and above, ensuring complete digital and physical protection.

- 100% signal blocking from 500 MHz (mobile - GPRS, EDGE, 3G, 4G, 5G, WiFi 2.4 & 5 GHz, Bluetooth 5.3, RFID )
- Shields from eavesdropping and remote hacking
- Lightweight, flexible, and durable design
- One-size-fits-most mobile phones
- Shields crypto wallets, car keys, and contactless payment cards
- Easy attachment with Velcro and MOLLE system
- Ideal for tactical missions, business meetings, or everyday use

## COLORS

- Digital Camo
- Black

## SIZE & WEIGHT

20 × 11 × 1.5 cm – approx. 80 g

## ORDER DELIVERY

< 1,000 pcs – 7 weeks

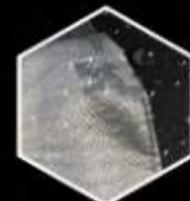
< 20,000 pcs – 14 weeks



**100% signal blocking**



**Universal size**



**Water resistant**



**MOLLE & velcro attachment**



# Intel Pouch – Silent Means Survival

Faraday-based pouch blocking over 135 dB of signal across all RF bands.

Shields phones, radios, and GPS from detection by enemy electronic surveillance — even when devices appear off.

Developed for operators in high-risk zones where signal leaks equal target locks.

In Ukraine, soldiers were geolocated and killed due to active or “off-but-broadcasting” devices. Intel Pouch eliminates this threat.

**INFRAHEX**  
THE STEALTH TEXTILE





100% signal blocking



Durable chest mount



Lightweight



MOLLE attachment



# Intel Chesty

Essential for stealth missions, secure transport, and personal data protection

- Blocks all signals: 2G-5G, GPS, Wi-Fi, Bluetooth, RFID
- Prevents geolocation, remote hacking, and eavesdropping
- Designed for one-handed access with a gloved support hand
- Mounts to the center of a chest rig or ballistic vest via MOLLE system
- Faraday cage effect: >70 dB attenuation at 1-10 GHz
- Water-resistant
- Lightweight, durable, and reliable in all conditions — even when wet

## COLORS

- Khaki
- Digital Camo

## SIZE & WEIGHT

One size fits all - 150 g

## ORDER DELIVERY

- < 1,000 pcs - 7 weeks
- < 20,000 pcs - 14 weeks

# Intel Chesty – Operational Control. Zero Signal Risk.

Wearable Faraday pouch mountable on plate carriers. Allows operators to view and control digital devices (map, comms, drone interface) with one hand, while keeping devices fully RF-shielded when closed. Blocks over 135 dB across all frequencies, eliminating geolocation and electronic targeting risks.

Designed for dynamic field ops where digital access is needed — but exposure is lethal.

**INFRAHEX**  
THE STEALTH TEXTILE





Practical  
stripe



Compact fold



Waterproof



100% signal  
blocking



## Intel Bag

- Blocks all signals: 2G-5G, GPS, Wi-Fi, Bluetooth, RFID
- Prevents geolocation, remote hacking, and eavesdropping
- Designed for rapid deployment and long-term re-use
- Ergonomic strap enable rapid and easy manipulation and carriage
- Faraday cage effect: >90 dB attenuation at 1-10 GHz
- Watertight design enabling full sealing and 100% waterproofness
- Lightweight, durable, and reliable in all conditions — even when wet

### COLORS

- Black

### SIZE & WEIGHT

30l - 420 × 550 × 350 mm

50l - 500 × 750 × 450 mm

### ORDER DELIVERY

< 1,000 pcs – 7 weeks

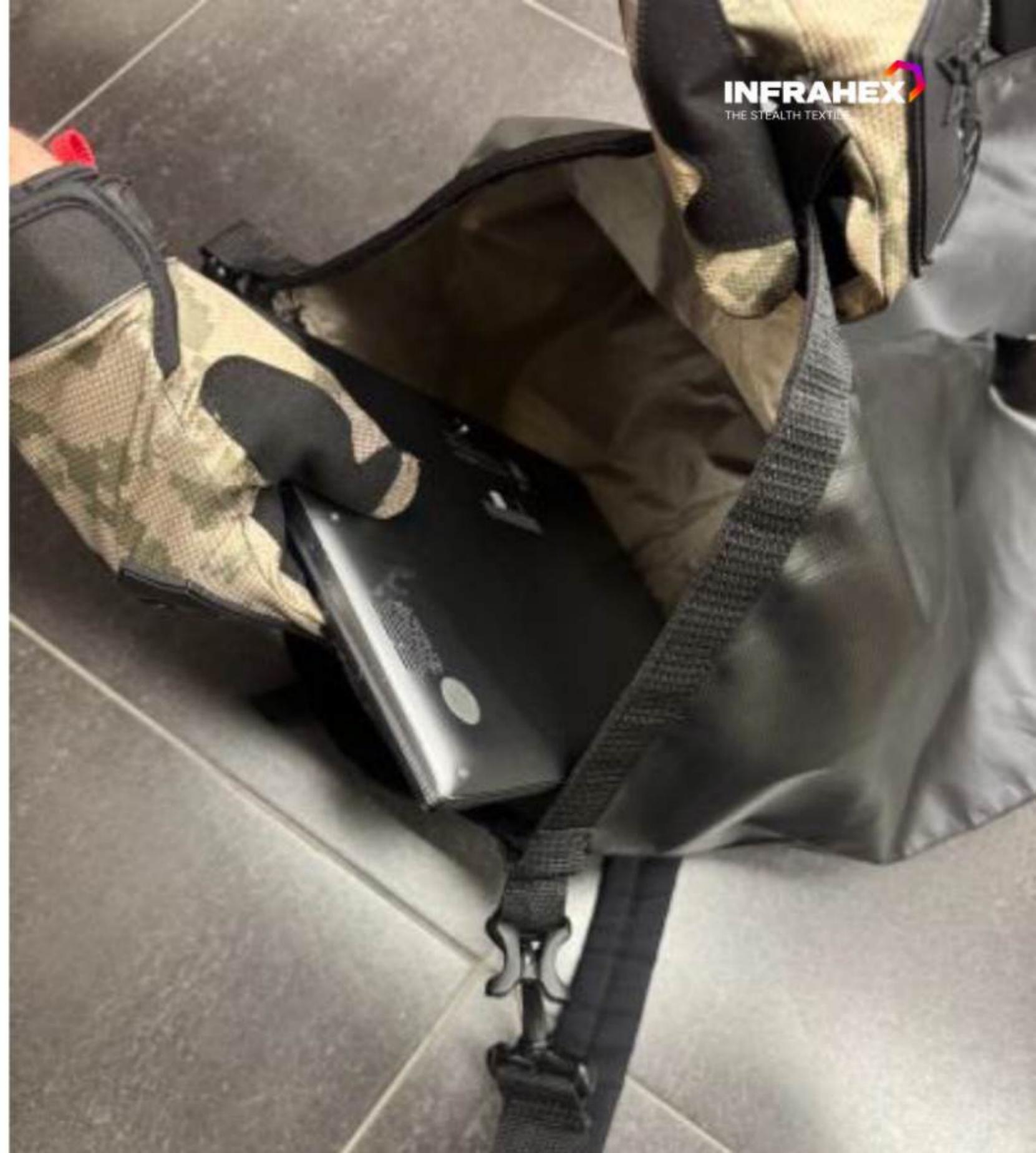
< 20,000 pcs – 14 weeks

# Intel Bag

**Mission-ready intel collection bag for securing electronic devices.**

Any item that transmits or receives signals (EMF, 5G, Wi-Fi, GPS, Bluetooth, RF – from short to long wavelengths) becomes **undetectable** once placed inside and immediately stops sending and receiving signals.

It is the only intel bag in the world that is fully **waterproof and floats** – even when loaded with IT and electronic equipment – keeping captured devices protected from water, impact and environmental damage.



# InfraHex Mission

Keep soldiers and equipment fully functional in hostile environments.



# InfraHex provides

**01**

## **Tailor made solutions**

InfraHex develops customized shielding solutions tailored to the specific needs of individual military units.

**02**

## **Small Unit Tactic Trainings**

InfraHex trains small tactical units to operate under thermal vision and drone surveillance – both without concealment and with InfraHex products.

**03**

## **Instructor certifications**

InfraHex can train and certify instructors and develop operational guidelines for SOF units based on real tactical scenarios.



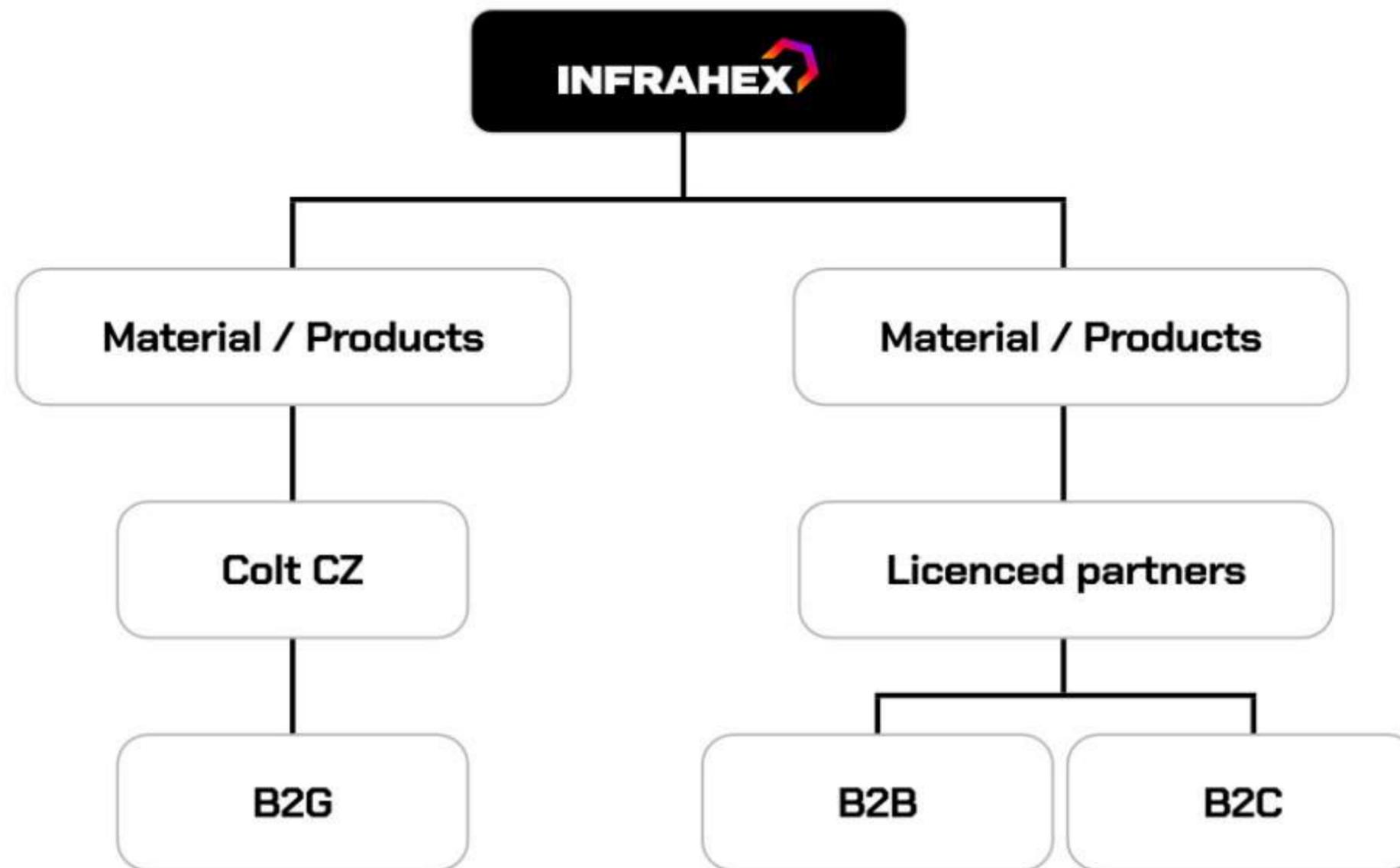
# Advantages of InfraHex

## InfraHex Advantages for Equipment

- ◆ Covers rifles, drones, comms gear, vehicles
- ◆ Eliminates heat signatures under drone & UAV scans
- ◆ Protects sensitive electronics from EM interception
- ◆ Durable, flame-retardant, weather-resistant
- ◆ Custom sizing & integration with tactical gear



# Business model





EXPLORE  
**INFRAHEX.COM**

🌐 [www.infracore.com](http://www.infracore.com)

☎️ +420 776 229 608

@ [info@infracore.com](mailto:info@infracore.com)