COUNTER DRONE TECHNOLOGY TO PROTECT YOU

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ABOUT MYDEFENCE

MyDefence is a technology company that specializes in manufacturing original equipment (OEM) for countering unmanned aerial systems (C-UAS) using radio frequency (RF) products and integrating emerging technologies to offer complete C-UAS solutions.

The company possesses a thorough comprehension of military requirements, infrastructure defense, and corporate operational needs, coupled with excellent engineering capabilities, enabling us to provide exceptional protection against malicious use of drones.

MyDefence offers detect and defeat solutions - fixed, mobile, and man-portable, providing a modular, scalable, flexible approach that can operate independently or be integrated into other network architectures.

MyDefence products are well-known for their reduced size, weight, power, and cost, with the wearable solution being globally recognized as a leading product. These products are combat proven and provide operational benefits. Combined with advanced Network Centric Warfare and various connectivity solutions, we present unmatched configuration options for the end-user.

MyDefence is headquartered in Denmark, with a presence in several locations in the United States. MyDefence received ISO9001:2015 certification.

To stay updated with our latest developments, kindly follow us on LinkedIn or visit our web site.

Drone technology is rapidly advancing, with drones being used for a range of purposes from delivering medical supplies to carrying out criminal and hostile military activities. This has led to an increase in the potential hazards and threats to critical infrastructure and military operations.

MyDefence specializes in detecting and mitigating malicious drone activity using RF detectors and jammers, as well as other technologies such as radars and EO/IR cameras. Our solutions provide multi-layered protection and can be customized to meet specific customer needs.

Our ARGOS (backend) and IRIS (frontend) software form the core of a multi-layered solution and provide Situational Awareness operational picture, as well as an interface to Command & Control systems such as FAAD C2, Medusa or Sapient through a simple open API.

Whatever your need, our highly skilled engineers are available to consult with you on the best approach for your specific requirements, ensuring that you have the best CUAS tailored solution.



linkedin.com/mydefence/

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COUNTER DRONE TECHNOLOGY





MULTI LAYER AND MULTI DOMAIN CUAS SOLUTION

A CUAS multi layered solution can be integrated from different kinds of sensors (RF, radar, EO/IR), to provide detection, identification, recognition, and geo-location of the threats, and offer different means of mitigation (Jamming, Spoofing, soft or hard kill) – according to the needs and authorization.



360 RF SENSOR

AIRBORN RF SENSOR Falcon 200

CUAS SOLUTION



DISMOUNTED SOLDIER WEARABLE SOLUTION

WEARABLE RF SENSOR

MyDefence is a world leader in RF based C-UAS solutions.

Our wearable solution offers dismounted soldiers a comprehensive, durable, and lightweight suite, comprising the WINGMAN RF Sensor and the PITBULL RF Jammer.

This wearable solution delivers full protection - from detection to defeat - against commercial drones deployed by hostile forces for reconniassance or as a weaponized delivery system.

Strategically distributed within the platoon, this versatile solution delivers peripheral protection for the entire force, empowering dismounted soldiers to confidently carry out their mission in the face of modern warfare challenges.



RF JAMMER GUN Handheld Jammer The WINGMAN wearable RF drone detector empowers operators to stay focused on their mission, knowing that the surrounding airspace is monitored and any drones in the vicinity are promptly detected.

The Wingman seamlessly delivers alerts in various modes, ranging from discreet sound cues in the earpiece to subtle lights or vibrations, tailored to the operator's preferences.

Engineered to endure the harshest weather conditions, the Wingman exhibits unrivaled durability and reliability.

Whether employed as a standalone device or integrated into a network leveraging the cutting-edge ATAK interface, the Wingman embodies the epitome of next-generation drone detection technology.



- Designed to withstand extreme temperatures.
- · Waterproof Protected cover caps protect the unused connectors, making it possible to wade through water and operate in heavy rainfall.
- · Alarms Provides an alert indicated by sound, vibration, or LED.
- · Ongoing updates MyDefence will keep supplying drone database updates; new search filters, updated software releases with new versions (according to your contract) to provide users with the latest technology updates.
- Extended Range Detection Available upon request for special missions.
- · High-performance Omni-directional antenna.
- · Threat Direction Finding capability.

Wingman 103

WEIGHT WITH BATTERY

FREQUENCY BANDS 2.4 GHz, 5.2 GHz, 5.8 GHz*

DETECTION RANGE Up to 6 km**

Standard external clip-on batteries (AN/PRC-148)

ACTIVITY DURATION 14 Hours

* Add an external active antenna for additional frequencies: 433MHz, 868MHz, 915MHZ,1.2GHz.
** Depending on RF environment & line of sight.

244 x 96 x 42 mm with battery

Wingman 105

840 g

2.4 GHz, 5.2 GHz, 5.8 GHz*

DETECTION RANGE Up to 6 km**

DISMOUNTED SOLDIER

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Internal battery

7 Hours

DIMENSIONS 154 x 96 x 60 mm

* Add an external active antenna for additional frequencies: 433MHz, 868MHz, 915MHZ,1.2GHz.
** Depending on RF environment & line of sight.

The PITBULL is a true wearable Counter UAS RF jammer that can be carried on the torso or on your gear (e.g., tactical vest) using the MOLLE straps. This device provides directional jamming, enabling users to mitigate the risk of malicious drone attacks.

Thanks to its compact form and lightweight construction, each individual can carry a personal PITBULL as a proactive measure against such attacks.

This jammer is user-friendly and can be used immediately without any complicated setup. It can function autonomously when connected to the Wingman or through manual operation.





Pitbull 100/101

WEIGHT 1330 g with battery

JAMMING RATIO 80 % at 1000m, subject to type of drone*

ACTIVITY DURATION 20 Hours (standby) FREQUENCY BANDS PB100: 2.4 GHz, 5.2 GHz, 5.8 GHz

PB101: 2.4 GHz, 5.2 GHz, 5.8 GHz and 1.6 GHz (GNSS)

POWER SUPPLY Standard external clip-on batteries (AN/PRC-148)

DIMENSIONS 243 x 90 x 60 mm with battery RF Drone Gun

WEIGHT 6 kg

communications.

EQUENCIES

JAMMING FREQUENCIES 900 MHz, 400 MHz, WIFI 2,4 GHz, 5,8 GHz

* Depending on line of sight.

delegated defense units.

GPS 1,5 GHz GNSS 1,2 GHz

* Depending on line of sight.



The RF JAMMER GUN ("Drone Gun") counters drones. The system can jam the radio modules that are most popular for drone control, video downlink and GPS frequencies.

The directional RF Jammer Gun works in selected frequency ranges only, to minimize collateral effects and not to interfere with other

Special Jamming modules (i.e. GNSS) are available on request.

Weighing only 6kg, the system is fully hand-held and mobile. The Drone Gun is simple and quick to operate - designed and ready to be used with a single push of a button (Power ON). Ideal for deployable forces such as police, army, public safety, and other state

> BATTERI OPERATION TIME Up to one hour

EFFECTIVE RANGE 3-5 km*

VEHICLE SOLUTION DRONE DETECTION AND MITIGATION

On the battlefield, combat vehicles are exposed to a range of hazards that not only threaten their combat effectiveness, but also jeopardize the safety of the soldiers who operate them. However, MyDefence has developed an innovative solution to protect against the dangers posed by enemy drones, whether they are being used for reconnaissance or offensive purposes.

Our state-of-the-art vehicle system is equipped with cuttingedge sensors that enables "on the move" detection.

They are enclosed in durable, ruggedized casings. These sensors are seamlessly integrated with a Situational Awareness system that can be networked to create a comprehensive view of the operational environment.

By providing robust protection against hostile drones, MyDefence empowers armored vehicles to operate with greater freedom and confidence, thereby enhancing the success rate of critical missions.

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360 RF SENSOR Watchdog 150

RF SENSOR

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SOLUTION

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RF JAMMER Dobermann 150/151





The WATCHDOG family of robust networked RF sensors presents a cutting-edge solution for detecting and analyzing control and video signals emitted by unmanned aerial vehicles (UAVs) and drone operators across a diverse spectrum of commercial drones, and DIY drones operating in the lower frequency bands.

Boasting features such as alarms, direction indication, and information on drone protocol and vendor details where applicable, the WATCHDOG 150 and 250 models are engineered to endure the rigors of military vehicles, withstanding intense vibration and shock, as well as harsh environmental conditions including dust, salt, vibration, and solar radiation, in accordance with MIL-STD-810G and MIL-STD461F standards.

Powered by Power over Ethernet (PoE) technology and equipped with a state-of-the-art vibration dampening mount, these sensors offer seamless installation and can be easily operated from the user-friendly MyDefence IRIS (frontend HMI) or integrated into existing situation awareness systems through the powerful MyDefence ARGOS (Backend API) platform.

Watchdog 150

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433 MHz, 868 MHz, 915 MHz, 1.2 GHz (Omnidirectional)

DETECTION RANGE Up to 3 km*

COVERAGE ANGLE (HORIZONTAL) 360°

MILITARY STANDARD MIL-STD-461F

* Depending on RF environment & line of sight.

Watchdog 250

FREQUENCY BANDS 2.4 GHz, 5.2 GHz, 5.8 GHz

Up to 9 km*

COVERAGE ANGLE (HORIZONTAL) 90°

COVERAGE ANGLE (VERTICAL) 90°

MILITARY STANDARD MIL-STD-461F

Dobermann 150/151

FREQUENCY BANDS DM150 2.4 GHz, 5.2 GHz, 5.8 GHz

DM151 2.4 GHz, 5.2 GHz, 5.8 GHz and 1.6 GHz (GNSS)

MILITARY STANDARD MIL-STD-810G

that can protect against drone threats by actively disrupting the control signal between the drone and its operator.

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DOBERMANN 150/151, however, is not "the typical" jammer and is packed with next-generation features that will make it stand out, including its scalability, jamming methods and autonomous mode.

DOBERMANN DM150/151 is designed to withstand vibration and shock of military vehicles along with a range of harsh environmental conditions including dust, salt, and solar radiation. and qualified to MIL-STD-810G and MIL-STD461F.

DOBERMANN DM150/151 are powered by PoE+ (Power Over Ethernet) and fitted with a vibration dampening mount, which makes it easy to install The DOBERMANN Counter UAS jammer can be operated from MyDefence Iris or integrated into existing situation awareness systems through MyDefence Argos.

Combining WATCHDOG sensors with DOBERMANN jammers mounted on all sides of a vehicle contribute to battle effectiveness and mission success rate as well as the safety of the combat crew.

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DOBERMANN is a ruggedized networked Counter UAS jammer

COVERAGE ANGLE (HORIZONTAL) 60° **COVERAGE ANGLE (VERTICAL)** 60°

CRITICAL INFRASTRUCTURE PROTECT YOUR ASSETS

Traditional security measures like access control, perimeter fences, ground sensors, and surveillance cameras are no longer sufficient to combat the current threat landscape.

Criminal and terrorist organizations have employed drones to infiltrate or assault high-value targets.

Therefore, the necessity for a 3-dimensional defense has become increasingly vital.

Our modular solutions offer complete coverage of large areas, effectively reducing the risk of drone infiltrations or attacks on strategic national assets, military bases, and civilian targets.

360 RF SENSOR Wolfpack 210

EO/IR SENSOR

High Resolution camaras

RF JAMMER Dobermann 360



WOLFPACK 210 is a cutting-edge networked RF sensor that functions as a robust perimeter protection system for stationary installations such as prisons, military camps, and airports.

Equipped with a 360° coverage and intelligent signal analysis, WOLF-PACK 210 can accurately pinpoint the direction of potential threats (with accurate DF - Direction Finding) by scanning both control signals and video feeds from unmanned aerial vehicles (UAVs).

Additionally, it can identify the specific make, model, and type of the target drone, which is then displayed on the IRIS (GUI frontend), providing the user with an accurate situational awareness. When used in combination with a network of sensors, it can secure a large perimeter area.

By triangulating the signals of two or more sensors, WOLFPACK 210 can calculate the coordinates of the drone. The Sensor Fusion technology implemented in IRIS guarantees that all sensor inputs are combined to produce a precise threat picture.

The lightweight and portable WOLFPACK 210 is versatile and can be mounted on vehicles or vessels, providing mobile protection for the surrounding area.

This system can be deployed in under 5 minutes with a simple configuration setup. Additionally, it can be integrated into existing security infrastructures with ease, using just two cables, via the plug and play interface or on a protocol level.



Wolfpack

DETECTION RANGE Up to 10 km*

COVERAGE ANGLE (HORIZONTAL) 360°

433 MHz, 868 MHz, 915 MHz, 1.2 GHz 90° (Omnidirectional)

2.4 GHz, 5.2 GHz, 5.8 GHz

COVERAGE ANGLE (VERTICAL)

Dobermann 360

jamming.

MyDefence backend Argos.

(GNNS) 90°

* Depending on RF environment & line of sight.

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DOBERMANN 360 is a networked Counter UAS jammer that can protect against drone threats by actively disrupting the control signal between the drone and its operator.

DOBERMANN 360, has advanced features that enable enhanced jamming capabilities - optional directional jamming in different sectors and different frequencies, as well as 360° omnidirectional

The DOBERMANN 360 Counter UAS jammer has manual operation or autonomous modes. It can be operated from MyDefence Iris or integrated into existing situational awareness systems through

AIRPORT SAFETY MULTI-LAYERED PROTECTION



As the incidents involving drones near airports increase worldwide, airports are in need of dependable countermeasures to prevent disruptions to flights, operations, and most importantly, ensure public safety.

To address this challenge, a multi-layered airport protection solution has been designed to provide airports with a defense system that incorporates redundancy and robustness, with multiple layers of detection, drone and pilot location, verification, and various means of mitigation against drone incursions that pose a threat to an airport's daily operations and the safety of human lives.

NAME OF BRIDE

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SPOOFER MITIGATION

After Detection of a drone, by RF sensors and/or Radars, the process of handling a threat comprises of two important steps – Recognition and Identification. MyDefence has integrated a number of different Electro-Optical cameras, including Infra-Red sensors, to enhance recognition and identification capabilities on day and night.

The advanced, electro-mechanical remotely operated modular electro-optical system consists of continuous zoom and autofocus features with a manual/auto control gain. It enables the system use of the EO/IR trackers to track the targets with visual contact, as well as utilising the latest Artificial Intelligence (AI) tracking algorithms.

Thermal imaging as well as a sensitive daytime camera, provide ON-VIF compliance. Installation can be done with standard industry mounting options and the possibility of choosing lenses and imaging capabilities according to specific requirements.

MyDefence user friendly, situational awareness software facilitates easy integration with the high-resolution imaging for target identification. Specific preferred EO/IR sensors have already been integrated; however, any other customer specific EO/IR camera may be integrated as well.

EO/IR sensor

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Auto tracking capability Manual / Auto control

Jammer Gun Fixed

The RF jamming system is an active soft-mitigation solution. The Jammer Gun fixed installation enables operation managed by the IRIS Situational Awareness system, slaving the directional jammer in the direction of the threat discovered by different sensors.

The Jammer disrupts the communication link between the controller and the drone and the navigation signals (GNSS) which causes the drone to return home or land in its location (depending on the fail-procedure of the drone). This solution provides coverage of commercial drone frequencies and offering effective countering of single or swarms of drones.

INTERNAL MODULATION Pseudo Random Noise

OWER CONSUMPTION

JAMMING DISTANCE DIRECTIONAL ANTENNA 5 km



FREQUENCY BANDS POWER AMPLIFICATION 428-437 Mhz 10w 868-928 Mhz 10w 1150-1300 Mhz 10w 1559-1610 Mhz 10w 2400-2500 Mhz 10w 5725-5850 Mhz 10w

- The Spoofer is an extremely effective means to mitigate malicious use of drones.
- · Spoofing replaces the need to jam or cyber-hack data links, focusing on GNSS signals only.
- · It is effective against all drones using GNSS, hence it effectively mitigates swarms, multi-direction attacks, dark drones, manually piloted drones, and 4G/5G drones.
- · No protocol reverse-engineering is required, no whitelisting works out of the box.
- Effective both as a stand-alone or an integrated with MyDefence detection and Situational Awareness systems.
- · Compact and lightweight, the same effector can be used in fixed installations or portable.
- Easy and rapid deployment, in various set-ups, ready to use in 5 minutes according to needed protection.
- Different modes of mitigation Divert / Holding pattern / Geo-Fence, different levels of power output and transmitting pattern (omni / directional) enables flexibility and control over the effect.
- MIL-STD 810G compliant, Operational, Tested and Deployed solution - Field proven effector.



Spoofer

EFFECTED CONSTALATIONS GPS, Galileo, GLONASS, BeiDou

OPTIONAL FREQUENCIES GNSS L1, L2, L5

MILITARY STANDARD MIL-STD 810G

Zero-emission on emergency broadcasts, cell phone communication

VOLTAGE, POWER 28VDC Typical, 12-36 VDC (MIL-STD-1275), 100W





300mm x 300mm x 94mm

7 Kg (Depends on frequency options)

COOLING Passive Cooling

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INGRESS PROTECTION

OPERATING TEMPERATURE -20 °C to +55 °C

BORDER SECURITY AGAINST MALICIOUS UAV ACTIVITIES

In this 21st century landscape, safeguarding international borders against malicious UAV activities has become a pressing concern for border control agencies worldwide.

MyDefence, a leading manufacturer of advanced border security solutions, offers support to stakeholders by deploying cutting-edge systems that encompass a diverse array of sensors and mitigation measures along the delineated border.

This enables effective defense of the airspace, thwarting unlawful and potentially harmful drone incursions with utmost efficiency.





MyDefence has vast experience and expertise with Radar integrations, from different manufacturers and models.

Specializing in Counter Drone detection, MyDefence integrated 3D radars to create accurate drone location, whether for long or short range, according to the customers' needs, protection characteristics and budget.

If you already have a radar as a part of your airborne threats detection system, we can enhance and improve it with RF detection and different means of mitigation. WATCHDOG 202 is a networked RF sensor, used to protect stationary installations and create perimeter protection needed at specific compounds such as prisons, military camps, airports etc.

WATCHDOG 202 has 90° coverage and intelligent signal analysis, that enables accurate indication of the threat direction (DF - Direction Finding). Searching both control signals and video feeds from drones, WATCHDOG 202 can identify the make, type, and model of the target drone.

The information is displayed on the IRIS (GUI frontend) providing an accurate situational awareness. Creating an array of networked sensors enables coverage of larger perimeter, and the triangulation created by combining detection of two or more sensors enables pinpoint drone location, to the level of exact coordinates of the threat.

Together with the true Sensor Fusion technology implemented in IRIS, we provide an accurate threat picture, combining all sensor inputs. With a simple configuration setup, WATCHDOG 202 can be effortlessly integrated into an existing security infrastructure using two cables only, via the plug and play interface or on a protocol level.



3D Radar

Choose and integrate any drone detection radar.

Watchdog 202

DETECTION RANGE Up to 10 km*

FREQUENCY BANDS 2.4 GHz, 5.2 GHz, 5.8 GHz

* Depending on RF Environment.

Watchdog 202

COVERAGE ANGLE (HORIZONTAL) 90°

COVERAGE ANGLE (VERTICAL) 90° \mathbf{E}



IRIS is a cutting-edge platform that seamlessly integrates and supports all MyDefence sensors, as well as a wide range of third-party products. Its sleek, minimalist design and intuitive user interface provide users with only the essential information they need to respond to a drone threat effectively.

IRIS combines inputs from multiple sensors, enabling it to detect, track, and neutralize potential drone threats. It boasts a variety of built-in features that streamline the user's workload, such as automatic jamming when a drone breaches a restricted zone and generating comprehensive reports on drones operating in the monitored airspace.

At MyDefence, we prioritize user experience in our design process. Our platform is built with simplicity in mind, and we provide users with the flexibility to customize their display settings by removing any extraneous information. Additionally, all sensors can be effortlessly updated through IRIS, providing complete oversight, and simplifying maintenance.



SITUATION AWARENESS INTEGRATION MyDefence is proud to present the core of our Counter UAS systems - comprised of ARGOS as the Backend and IRIS at the Frontend.

ARGOS enables functionality and control of MyDefence cutting edge RF sensors and Jammers as well as the operation of 3rd party subsystems like Radars, EO/IR cameras, and different effectors for mitigation. ARGOS performs the sensor fusion providing an accurate threat picture, combining all sensor inputs.

IRIS is the Frontend, the User Interface, that brings all the relevant data in a minimal and simple way to the system operator. IRIS presents Sensor Fusion output, a unified common operational picture built from all sensors, that provides accurate Situational Awareness.

IRIS/ARGOS is compliant with Sapient and has been integrated Medusa and other C2 systems.



With the simple interface of IRIS, the operator can easily define alarm zones for perimeter protection, mount and operate the different sensors and means of mitigations.

MyDefence R&D department integrated sensors and effectors, to create a variety of comprehensive enhanced solutions according to the customers' needs.

We also have the flexibility and capability to integrate our system into other C2 / Situational Awareness systems.



SAPIENT COMPLIANT MEDUSA INTEGRATION MULTI SENSOR FUSION CAPABILITY





THIS ICON INDICATES THAT ALL THE PRODUCTS CAN BE INTEGRATED IN TO A SITUATION AWAERNESS SOFTWARE

FALCON DRONE PILOT LOCATOR

FALCON is an airborne detector, providing the operator information about the location of the threatening drone and drone pilot, beyond land-based sensors.

FALCON making it possible to mitigate the threat, by apprehending the pilot, preventing both the active drone threat and the next threat from occurring.

By flying above the ground obstacles, the FALCON will have enhanced line of sight of the controller. When the controller is detected, the signal is followed with the FALCON flying RF sensor, and the drone's camera is used to identify the threat.

FALCON makes it easier to search an area for the drone pilot, as you are given the direction of the controller's signal, while having a camera visual feed from the drone carrying the FALCON.

Falcon 200

DETECTION RANGE Up to 10 km*

127 x 100 x 25 mm

FREQUENCY BANDS 2.4 GHz, 5.2 GHz, 5.8 GHz

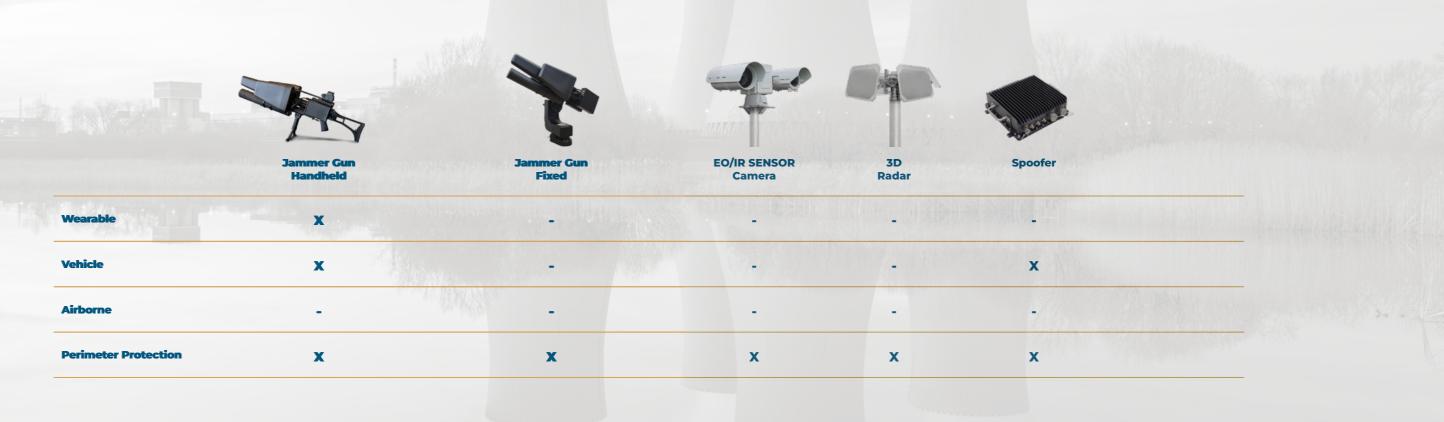
WEIGHT 300 g **COVERAGE ANGLE (HORIZONTAL)** 90°

COVERAGE ANGLE (VERTICAL) 90°

* Depending on RF Environment.







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