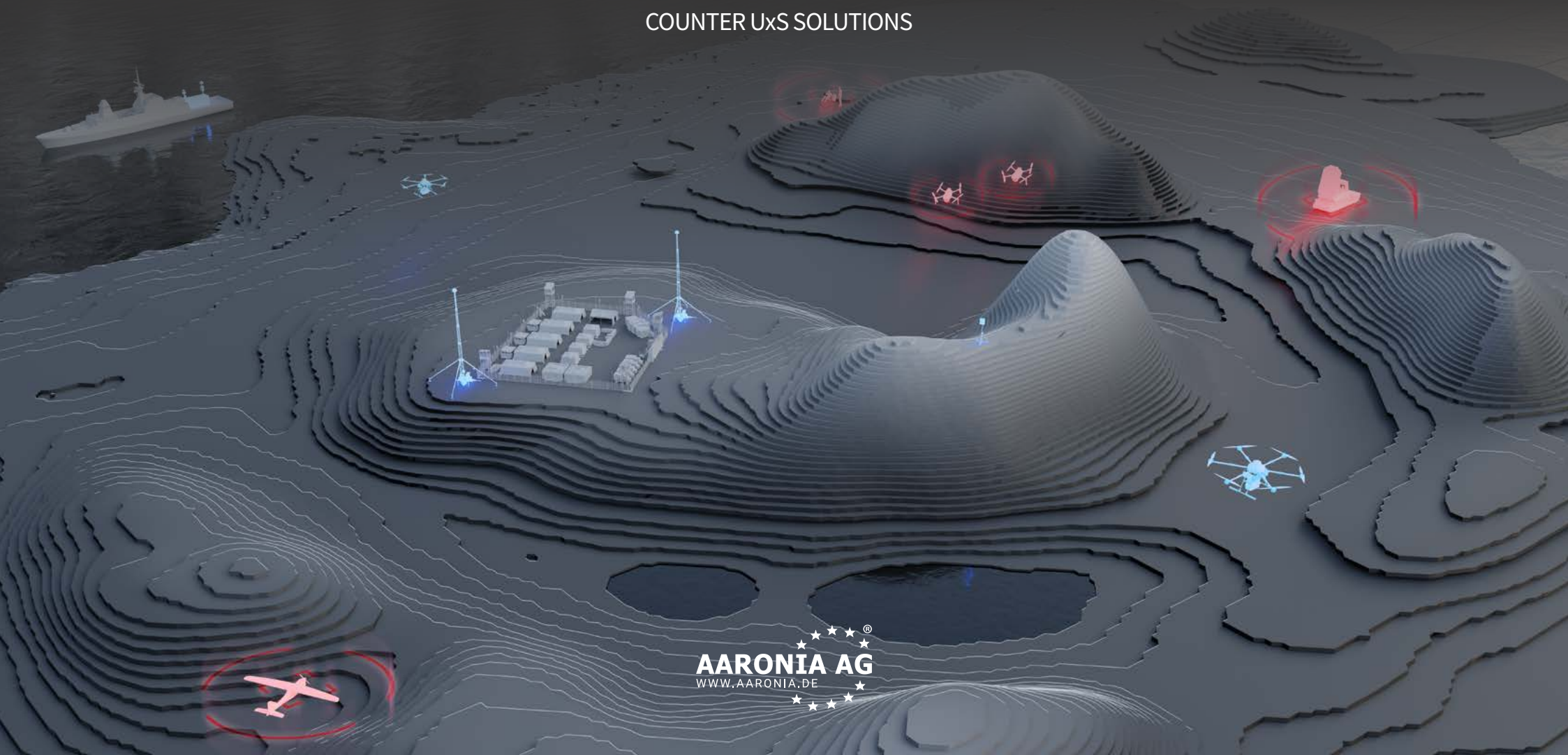




AARTOS™
COUNTER UxS SOLUTIONS




AARONIA AG
WWW.AARONIA.DE

OVER 20 YEARS OF SIGNAL EXCELLENCE



Aaronia AG, a German company with over 20 years of expertise in RF and microwave communication testing, has leveraged its extensive experience in real-time RF spectrum monitoring to develop advanced methods for detecting and locating unmanned vehicles (UxS) across surface and aerial domains. For the past 13 years, Aaronia AG has been at the forefront of counter-UxS technology,

consistently releasing new product generations regularly to meet evolving security demands. The flagship AARTOS™ system has proven its capabilities globally, serving a diverse range of clients, including defense ministries (such as the German, Austrian, Australian, Latvian, Ukrainian, and Estonian militaries), major international airports (like Heathrow, Muscat, and Changi), cor-

rectional facilities, ports, police forces (e.g., Czech Police, Morocco's Gendarmerie Royale, Cyprus Police), intelligence agencies, border patrols, and VIP protection. With more than 700 installations worldwide, AARTOS™ is recognized as the world's leading RF-based drone detection system, now in its sixth generation. Beyond drone detection, AARTOS™ offers comprehensive spectrum analysis

capabilities, enabling real-time direction finding for any signal within its frequency range. Its modular design—both in hardware and software—ensures unparalleled versatility, allowing users to achieve full-spectrum situational awareness alongside powerful C-UxS capabilities.





INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE SYSTEMS.

X2

The portable and quick-to-use AARTOS™ X2 is a decoding system that exactly shows the position of DJI drones and drone pilots and even their home position.

Alternatively, it is also available as a purely stationary 24/7 monitoring system with mesh capabilities.

X7

A high precision direction finding system combined with a large detection range. The AARTOS™ X7 consists of a 8 sector IsoLOG® Fox DF 80 antenna array and three spectrum analyzers (Command Center or 19" rack). Perfect for both single-system and multi-grid system setups.

X9

The AARTOS™ X9 combines highest precision and ultra-wideband monitoring real-time detection over multiple frequency bands. It consists of an IsoLOG® DF 160-UA antenna array with 16 sectors and the Command Center or 19" rack, perfect for ultra-high-range drone detection grids.

HAWK

The AARTOS™ HAWK T1 is a cutting-edge, distributed radio frequency (RF) geolocation system based on Time Difference of Arrival (TDoA) method. It is specifically designed for mobile (Payload) and stationary (Ground) deployment scenarios.

Typical Range (Consumer UAV) >	Max. 5 km	2 km - 5 km	Standard: max. 14 km Long range: max. 40 km	Max. 40 km
Typical Range (Military UAV) >	-	-	max. 80 km	Max. 80 km
Frequency Coverage >	2.4 GHz + 5.8 GHz	700 MHz to 6 GHz	400 MHz to 6 GHz (optionally 20 MHz to 8 GHz)	10 MHz to 8 GHz (9 kHz to 18 GHz available soon)
Tracking Type >	Drone GPS decoding	Drone GPS decoding & RF Angle of Arrival	Drone GPS decoding & RF Angle of Arrival	RF Time Difference of Arrival
Supported Decoding >	DJI OcuSync 1-4, DJI WiFi, RemoteID	DJI OcuSync 1-4, DJI WiFi, RemoteID, MAVLink, ADS-B	DJI OcuSync 1-4, DJI WiFi, RemoteID, MAVLink, ADS-B	-
Typical Decoding Accuracy >	2 - 3 m	2 - 3 m	2 - 3 m	-
Typical Tracking Accuracy >	-	4° to 6°	1° to 3°	Up to 20x20 m
Antenna Sectors >	Omnidirectional	8	16	Omni or directional (changable)
Multi Frequency Swarm Attack >	No	Limited	Yes	Yes
Scalable >	No (Yes with stationary versions)	Yes	Yes	Yes (3 mandatory nodes)
Recommended Grid Distance >	-	2 km	3 km	3 km - 10 km
Countermeasures >	Handheld Jamming	Handheld / Sector / Smart Jamming	Handheld / Sector / Smart Jamming	Handheld / Sector / Smart Jamming

Detect. Track. Decode. In Real Time.

The AARTOS™ X2 is a compact drone detection and decoding system designed for mobile and stationary operations. It detects and tracks commercial drones at ranges of up to 5 km and decodes DJI OcuSync, WiFi and RemoteID

signals in real time. The system displays the exact position of the drone, operator, and home point, along with telemetry data, enabling reliable situational awareness and fast operational response.

› DETECTION

2.4 GHz & 5.8 GHz drone protocol decoding and tracking including home point and operator location

› RANGE

5 km detection range with a reference target at 2.4 GHz (DJI Phantom 4)

› DECODING

Real-time decoding of DJI OcuSync 1-4, DJI WiFi and RemoteID

› FORM FACTORS

Mobile tablet spectrum analyzer or rugged 24/7 fixed installation outdoor casing





› X2 Mobile

Drone Protocol Decoding

High Tracking Accuracy

Highly Portable

The AARTOS™ X2 Mobile is a highly portable drone detection and decoding system in a rugged tablet form factor, designed for rapid deployment and mobile operations. The X2 detects and tracks commercial drones, their operator and homepoint at ranges of up to 5 km and supports real-time decoding of DJI OcuSync 1–4, DJI WiFi and RemoteID in the 2.4 GHz and 5.8 GHz bands.

Detection Range › Max. 5 km

Frequency Range › 2.4 GHz and 5.8 GHz

Form Factor › Rugged Mobile Tablet PC

Analyzer Units › 1

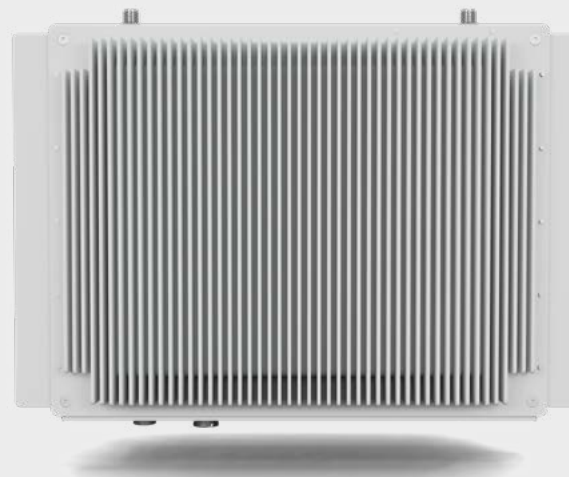
Detection Type › Real-time drone protocol decoding

Decoding › DJI OcuSync 1-4, DJI WiFi, RemoteID

Tracking Accuracy › Typ. 2 to 3 meters

Battery Runtime › Typ. 3.5h (hot-swappable)

Weight › < 6.5 kg



› X2 Stationary

Drone Protocol Decoding

Fixed Installation

Multi-System Solution

The AARTOS™ X2 Stationary is a rugged 24/7 outdoor drone detection and decoding system designed for permanent installation in harsh environments. Multiple X2 Stationary units can be networked to form mesh-based detection networks for extended coverage. With remote control capabilities and support for custom mission data sets, the system is ideal for fixed-site drone monitoring and perimeter protection.

Detection Range › Max. 5 km

Frequency Range › 2.4 GHz and 5.8 GHz

Form Factor › Rugged outdoor casing

Analyzer Units › 1

Detection Type › Real-time drone protocol decoding

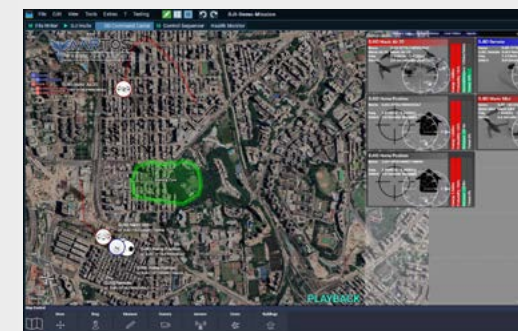
Decoding › DJI OcuSync 1-4, DJI WiFi, RemoteID

Tracking Accuracy › Typ. 2 to 3 meters

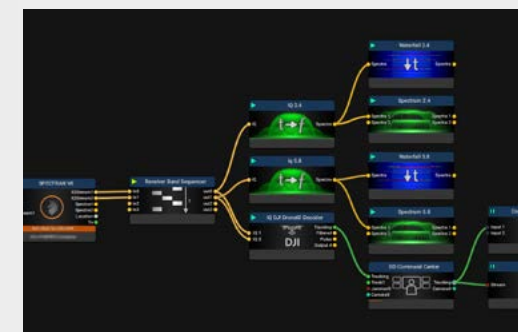
Protection › IP65

Mounting › Mast mount, wall mount, or pole installation

Weight › < 9 kg



Precise geolocation and tracking of drones, its pilots, and its home points



Open mission structure for easy adaptation to current conditions



An intuitive and well-organized software interface designed for easy use in any situation

See Threats Before They Arrive.

The AARTOS™ X7 delivers ultra-precise drone detection with exceptional long-range performance. Combined with the Iso-LOG® FOX DF 80 antenna array and a powerful analyzer unit, it

achieves tracking accuracy of 4°–6° and detects targets up to 5 km away. Its compact design enables rapid deployment, ideal for flexible single or multi-grid system operations in demanding environments.

► DETECTION

Real-time spectrum monitoring and precision direction finding from 700 MHz to 6 GHz.

► MESH

Freely scalable mesh capabilities with centralized C2 command unit

► SENSORS

Lightweight 8-sector high gain antenna array with in-built omnidirectional antenna

► FORM FACTORS

Laptop analyzer for rapid deployment, rugged 24/7 outdoor box or 19" server rack for fixed installation



Mobile/fixed/integrated

Mesh capability

Remote controllable

> AARTOS™ X7

The AARTOS™ X7 sensor fusion features 3 inbuilt real-time spectrum analyzers with a total instantaneous IQ capture bandwidth of 735 MHz and a frequency range of 700 MHz to 6 GHz. It is capable of scanning 6 GHz in less than 2 ms with a sweep speed of up to 3 THz/s.



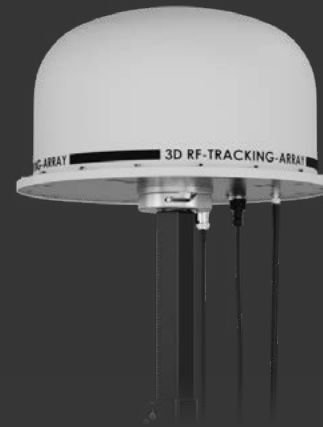
Tracks any RF source

Pulses down to 8 μs

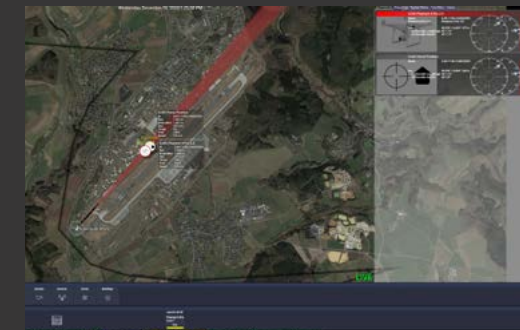
24/7 outdoor use

> IsoLOG® Fox DF Tracking Array

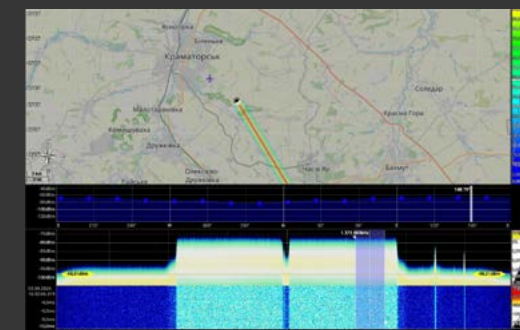
This compact state-of-the-art tracking antenna features a high density array of 8 antennas. This enables passive pinpoint accuracy direction finding of any RF source between 700 MHz to 6 GHz in real-time with an accuracy of 4° to 6°.



Gapless real-time visualization across the entire frequency range



Angle of Arrival drone triangulation combined with drone protocol decoding for reliable airspace security



4° to 6° angle of arrival accuracy across the entire frequency range

Form Factors > Command Center, 19" outdoor-rack, system integration

Analyzer Units > 3

Supported Frequency Range > 700 MHz to 6 GHz

Real-time Bandwidth > 735 MHz

POI > 97 ns (FFT-based), 10 ns (direct I/Q-based)

DANL (internal preamp on) > Typ. -170 dBm/Hz

Sweep Speed > Up to 3 THz/s

RF Connectors > Up to 3x Rx SMA, 1x Rx N

Reference Accuracy > 0.5 ppm

RBW > 62 mHz to 57 MHz

Attenuator Range > 50 dB / 70 dB (0.5 dB steps)

ADC > Up to 6 x 2GSPS 16-Bit

DAC > Up to 3 x 2GSPS 14-Bit

Detection Instrumental Range > Up to 5 km

Spatial Coverage > 360° dome coverage

Frequency Range > 700 MHz to 6 GHz

No. of Antennas > 8

Type of Antenna(s) > Directional antenna array

Detection Type > AoA (Angle of Arrival), protocol decoding

Detection Accuracy > Up to 4-6°

Response Time > 1-2 seconds

Simultaneous Tracks > Theoretically unlimited

Dimensions (ØxH) > 600 x 380 mm

Operating Temp. > -20°C - +60°C (default)

Storage Temp. > -30°C - +70°C

Protection Class > IP65

Precision Surveillance at Massive Scale.

The combat proven X9 scans the entire frequency range more than 1000 times per second. With an enormous range of up to 80 km, the AARTOS™ X9 is perfect for the monitoring of large areas. The optional multi-site solution consists of several systems that feed to a central monitoring PC which manages all systems simultaneously. The unique advantage of our multi-site solution lies in its ability to triangulate signals with very high accuracy.

› RANGE

Up to 80 km detection range with 1° to 3° accuracy for Military UxS and 40 km for consumer grade drones

› DETECTION

Seamless real-time detection of UxS emitters from 400 MHz to 8 GHz including ultra-short bursts

› SENSORS

RF geolocation, 4D radar detection and EO/MWIR camera tracking ensuring maximum capabilities

› SMART JAMMING

Selective sector-based smart jamming across the entire frequency band of 400 MHz to 6 GHz



➤ AARTOS™ X9

The AARTOS™ X9 sensor fusion features up to 6 inbuilt real-time spectrum analyzers with a total instantaneous IQ capture bandwidth of 1.470 MHz and a frequency range of 400 MHz up to 8 GHz. It is capable of scanning 6 GHz in less than 1 ms with a sweep speed of up to 6 THz/s.

- Mobile/fixed/integrated
- Mesh capability
- Remote controllable

Form Factors	➤ Command Center, 19" outdoor-rack, system integration
Analyzer Units	➤ 4 (optionally up to 6)
Supported Frequency Range	➤ 10 MHz to 6 GHz (optionally 8 GHz)
Real-Time Bandwidth	➤ Up to 1.470 MHz (with 6 inbuilt analyzers)
POI	➤ 97 ns (FFT-based), 10 ns (direct I/Q-based)
DANL (internal preamp on)	➤ Typ. -170 dBm/Hz
Sweep Speed	➤ Up to 6 THz/s
RF Connectors	➤ Up to 6x Rx SMA, 1x Rx N
Reference Accuracy	➤ 0.5 ppm
RBW	➤ 62 mHz to 57 MHz
Attenuator Range	➤ 50 dB / 70 dB (0.5 dB steps)
ADC	➤ Up to 12 x 2GSPS 16-Bit
DAC	➤ Up to 6 x 2GSPS 14-Bit

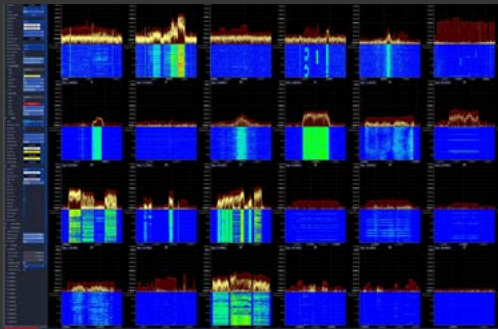


➤ IsoLOG® DF Tracking Array

The state-of-the-art tracking antenna features a high density array of 16 tracking antennas. This enables passive pinpoint accuracy direction finding of any RF source between 400 MHz to 8 GHz in real-time with a range of up to 80 km (MIL-UAV) / 14 km (commercial drones).

- Tracks any RF source
- Pulses down to 8 µs
- 24/7 outdoor use

Detection Instrumental Range	➤ Up to 80 km (MIL-UAV), up to 14 km (commercial drones)
Spatial Coverage	➤ 360° dome coverage
Frequency Range	➤ 400 MHz to 8 GHz
No. of Antennas	➤ 16
Type of Antenna(s)	➤ Directional antenna array
Detection Type	➤ AoA (Angle of Arrival), protocol decoding
Detection Accuracy	➤ Up to 1-3°
Response Time	➤ 1-2 seconds
Simultaneous Tracks	➤ Theoretically unlimited
Dimensions (ØxH)	➤ 960 x 360 mm
Operating Temp.	➤ -20°C - +60°C (default)
Storage Temp.	➤ -30°C - +70°C
Protection Class	➤ IP67 (default)



Gapless real-time visualization across the entire frequency range



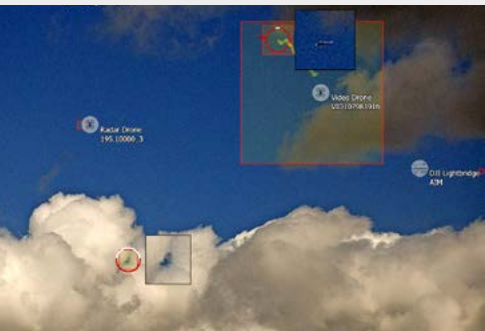
Angle of Arrival drone triangulation combined with drone protocol decoding for reliable airspace security



A selection of different form factors ensures optimal performance and reliability in any use case



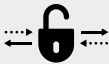
Dedicated long range decoding antenna array for an exceptional range of over 40 km



Fast AI target classification, tracking and false alarm rejection



The RTSA-Suite PRO software integrates multiple sensors and effectors into a unified situational picture



Long Range Decoding

Long range antennas can extend the decoding range dramatically to up to 40 km (FCC). With the use of high-gain directional antennas the operator is able to reliably detect drones and drone swarms and their operator(s) at exceptionally high distances.

Protocol Decoding
DJI OcuSync & WiFi/RemotID
1-3 meters accuracy

Decoding Range	Up to 40 km (open field & line of sight)
Spatial Coverage	360° dome coverage
Frequency Range	2.4 GHz / 5.8 GHz
No. of Antennas	8
Type of Antenna(s)	Directional
Sectors	4
Detection Type	Protocol Decoding
Tracking Accuracy	1 - 3 m
Response Time	1-2 seconds
Simultaneous Tracks	Theoretically unlimited
Dimensions (ØxH)	700 x 1120 mm
Operating Temp.	-20°C - +60°C



EO/MWIR Camera

The AARTOS™ system comes with the optional Visual Detection System - a fully integrated aerial object camera solution, perfectly matched to the RF detection sensors of the AARTOS™ system with the latest AI tracking and classification mechanisms.

AI precision tracking
Payload detection
Optical and thermal lens

Max. Classification	4.3 km
Max. Tracking	8 km
Pan / Tilt Range	Continuous 360° BLDC / 90° BLDC
Max. Speed	0.008°/s to 120°/s
Resolution	0.001° (0.018mrad)
Optical Sensor	1920 x 1080 HD
HFOV	1.4° to 29.0°
Focal Length	13 mm to 261.5 mm
Thermal Sensor	1280 x 720 HD cooled thermal
Sensor Type	High-sensitivity cooled infrared
Spectral Range	MWIR - 3.5um to 5um
HFOV	0.81° to 10.1°
Focal Length	72 mm to 900 mm



> 4D UAV Radar

The 4D UAV radar provides advanced detection and classification of radio-silent targets, ensuring comprehensive surveillance even in challenging scenarios. It synergizes perfectly with other AARTOS™ sensors, enhancing overall system performance and situational awareness.

Radio-silent threats

Automatic classification

Seamless integration

- Instrumented Range** > 20 km
- Detection sUAV Range** > Up to 6 km
- Spatial Coverage** > 360° azimuth | ≥90° elevation
- Type of Radar** > 4D, AI tracking
- Detection Type** > Micro doppler
- Detection Accuracy** > <0.5° azimuth | <0.5° elevation
- Field of View** > 130° azimuth x 90° elevation
- Frequency Band** > KU-band
- Dimensions** > 42.5x33x18 cm (one panel)
- Operating Temp.** > -40°C - +65°C
- Regulatory** > CE/FCC
- Protection Class** > IP66, MIL-STD-810 H



> 360° Smart Jamming

Selective, sector-based RF source jamming with eight sectors and multiple omnidirectional antennas, providing seamless coverage from 400 MHz to 6 GHz. With a reach of up to 10 km, it delivers comprehensive protection against unauthorized RF emissions across a broad frequency range.

Highly selective jamming

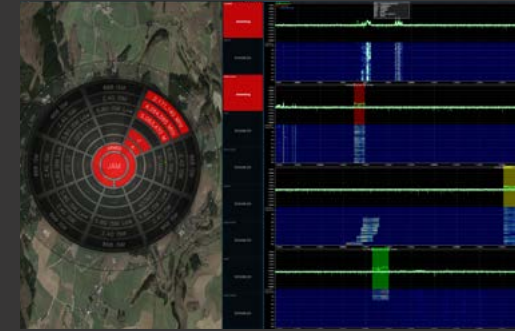
Counters any RF source

Gapless frequency band

- Jamming Range** > Up to 10 km
- Spatial Coverage** > 360° azimuth
- No. of Antennas** > 8 sector + multiple omnidirectional antennas
- Type of Antenna(s)** > Sector & omnidirectional antennas
- Reaction Time** > 1 second
- Jamming Type** > Automatic, semi-automatic, manual
- Jamming Reactive Frequencies** > 400MHz - 6GHz
- Jamming Algorithms** > Various
- Output Power** > 100 W/sector
- Operating Temp.** > -30°C - +65°C
- Storage Temp.** > -30°C - +70°C
- Protection Class** > IP67 (default)



Low SWaP high-performance medium range radar with target classification



Intuitive and flexible smart jammer interface seamlessly integrated into the RTSA-Suite PRO software



Fixed-site installation with optional multi-system mesh for enhanced on-site protection



Pinpoint Signals. Anywhere. Anytime.

The AARTOS™ HAWK T1 is a cutting-edge, distributed radio frequency (RF) geolocation system based on Time Difference of Arrival (TDoA) method. It is specifically designed for mobile (Payload) and stationary (Ground) deployment scenarios. Both versions use the SPECTRAN® real-time spectrum analyzer, syn-

chronized via multi-band GNSS + PPS or external synchronization inputs. The integrated, industrial-grade computer — an in-house development by Aaronia AG — provides robust on-board signal processing, supporting autonomous operation, even in GPS-degraded or jammed environments.

› DETECTION

High accuracy across the whole frequency band of 9 kHz to 18 GHz with detection ranges up to 80 km

› PROCESSING

Integrated high-performance industrial grade PC system including full IQ recording capabilities

› DEPLOYMENT

Mobile UAV payload platform or man portable ground deployment in harsh environments (IP65)

› SENSORS

Broadband omnidirectional with optional high gain directional antennas



> HAWK T1 Payload

Time Difference of Arrival

Airborne Operations

Multi-System Solution

Designed for drone operations (multicopters/fixed-wing), this system features a compact, lightweight (~4 kg), vibration-resistant housing with universal mounting. It includes hybrid passive/active cooling and is delivered in a rugged case—ideal for tactical drone detection, tracking, and signal geolocation in short-term mobile deployments.

Form Factor > Compact housing for airborne operations

Analyzer Units > 1

Frequency Range > 10 MHz to 6/8 GHz or 9 kHz to 18 GHz (coming soon)

GNSS Receiver > Multi-band (L1/L2/L5) GNSS, Glonass, Galileo, Beidou with PPS output, high-precision

Time Synchronization > GNSS+PPS standard, OCXO support, optional CSAC (chip-scale atomic clock)

Antenna > Omnidirectional broadband, upgradable to directional (optional)

Mounting > Universal mounts / brackets for drone integration

System Weight > ~4 kg (including analyzer, PC)



> HAWK T1 Stationary

Time Difference of Arrival

Fixed Installation

Multi-System Solution

Designed for permanent outdoor installation, this system features an IP65-rated hardened metal casing with weather protection and flexible mounting. Industrial active fan cooling with filtration ensures reliability—ideal for border surveillance, critical infrastructure protection, and wide-area coverage.

Form Factor > Hardened IP65 metal casing

Analyzer Units > 1 (more on demand)

Frequency Range > 10 MHz to 6/8 GHz or 9 kHz to 18 GHz (coming soon)

GNSS Receiver > Multi-band (L1/L2/L5) GNSS, Glonass, Galileo, Beidou with PPS output, high-precision

Time Synchronization > GNSS+PPS standard, OCXO support, optional CSAC (chip-scale atomic clock)

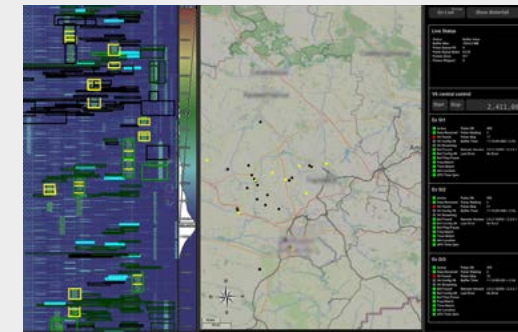
Antenna > Omnidirectional broadband, upgradable to directional (optional)

Mounting > Mast mount, wall mount, or pole installation

System Weight > < 9 kg (including analyzer, PC, antenna)



On-board signal processing, even in GPS-degraded or jammed environment



PPS-synchronized timebase via GNSS, OCXO, or optional atomic clock (CSAC)



Full-band real-time spectrum analysis including drone protocol decoding

Tactical Jamming. Strategic Advantage.

Our counter-UAV jamming solutions scale to any mission. The SJ Series programmable smart jammer delivers gapless 400 MHz–6 GHz coverage, defeating commercial and military drones at ranges up to 10 km with full 360° protection.

Choose from 1 to 8 sectors at 30 W or 100 W per sector. For fixed installations, the FJ Series offers ultra-sharp precision at up to 390 W across 7 bands. Mobile operators rely on the MJ40 handheld jammer: 40 W, 2 km range, 2-hour battery. All built to IP65 standards.

JAMMING

> SMART JAMMING

Advanced smart jamming ensures effectiveness against a wide range of evolving threats

> FREQUENCIES

Gapless range of 400 MHz to 6 GHz with full 360° coverage

> RANGE

Effective range of up to 10 kilometers with a maximum output of 100 W per sector

> VARIANTS

Ultra-compact handheld, fixed-site, and integrable models for a wide range of applications



➤ SJ SERIES Portable

The SJ-Series portable jammers are compact, high-performance systems for rapid deployment and flexible field use. Covering 400 MHz–6 GHz, they deliver programmable, gapless jamming with up to 200 W output. Sector-based coverage neutralizes drone threats up to 10 km. Rugged, IP65-rated, and reliable from -20°C to +60°C—ideal for tactical and mobile operations.

Selective Smart Jamming

Portable

Max. 200 W Total Output

Jamming Range ➤ Up to 10 km

Spatial Coverage ➤ 45° or 90°

No. of Sectors ➤ 1 / 2

Type of Antenna(s) ➤ Sector & omnidirectional antennas

Reaction Time ➤ 1 second

Jamming Type ➤ Automatic, semi-automatic, manual

Jamming Reactive Frequencies ➤ 400 MHz - 6 GHz

Jamming Algorithms ➤ Various

Output Power ➤ 100 W/sector

Operating Temp. ➤ -30°C - +65°C

Storage Temp. ➤ -30°C - +70°C

Protection Class ➤ IP67 (default)



➤ SJ SERIES Stationary

The SJ-Series Stationary Jammers are high-power, fixed systems for 24/7 wide-area protection. Covering 400 MHz–6 GHz, they deliver programmable, gapless jamming with up to 800 W output. Configurable 4- or 8-sector design enables full 360° coverage and counters drone threats up to 10 km. Rugged, IP65-rated, and reliable from -20°C to +60°C—ideal for permanent security.

Selective Smart Jamming

Fixed Installation

Max. 800 W Total Output

Jamming Range ➤ Up to 10 km

Spatial Coverage ➤ 180° or 360°

No. of Sectors ➤ 4 / 8

Type of Antenna(s) ➤ Sector & omnidirectional antennas

Reaction Time ➤ 1 second

Jamming Type ➤ Automatic, semi-automatic, manual

Jamming Reactive Frequencies ➤ 400 MHz - 6 GHz

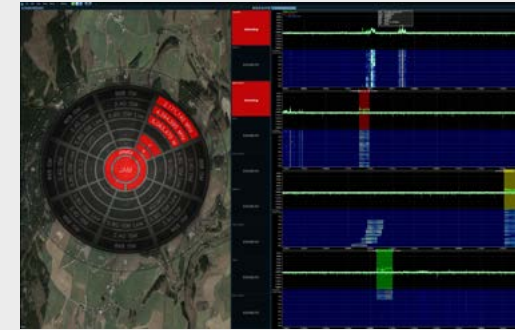
Jamming Algorithms ➤ Various

Output Power ➤ 100 W/sector

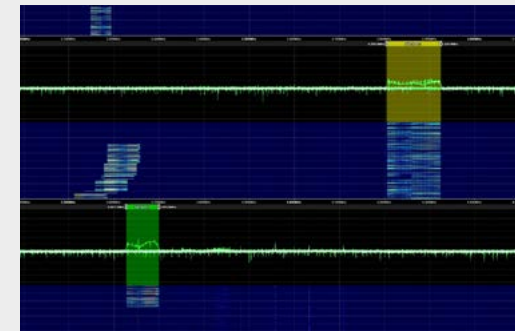
Operating Temp. ➤ -30°C - +65°C

Storage Temp. ➤ -30°C - +70°C

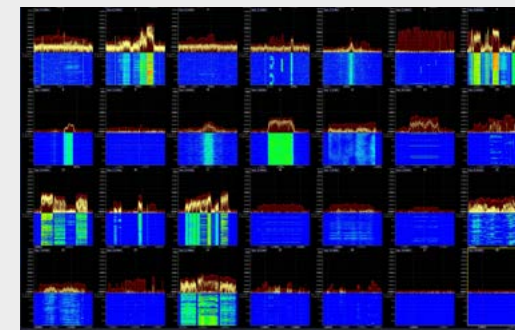
Protection Class ➤ IP67 (default)



Intuitive and flexible smart jammer interface seamlessly integrated into the RTSA-Suite PRO software



Live drag-and-drop control of jamming zones allows instant bandwidth and center-frequency adjustment during operation



Gapless real-time visualization across the entire frequency range



The FJ Series sector jammers are suitable for portable, stationary and vehicle-mounted operations



Compact, lightweight and powerful - the AARTOS™ MJ40 handheld jammer



› FJ SERIES

The FJ Series fixed bands sector jammer is a powerful, versatile device with up to 3 km range and support up to for 7 selectable frequency bands. It delivers precise jamming with high signal purity and up to 390 W output. Available in 180° or 360° models, it operates reliably in extreme temperatures from -20°C to +60°C.

Fixed Bands Sector Jammer

Portable or Stationary

Max. 390 W Total Output

- Jamming Range** › Typ. 3 km
- Spatial Coverage** › 180° or 360°
- No. of Sectors** › 2 / 4
- Type of Antenna(s)** › Sector and omnidirectional antennas
- Reaction Time** › <1 s
- Jamming Type** › Manual, semi-automatic, automatic
- Directional Frequencies** › 1.6 GHz (40 W), 2.4 GHz (25 W), 5.8 GHz (20W)
- Omnidirectional Frequencies** › 1.2 GHz (30 W), 5.2G Hz (20 W), optionally 433 MHz (20 W), 900 MHz (30 W)
- Operating Temp.** › -40°C - +60°C



› MJ40 Handheld Jammer

The MJ40 handheld UAV jammer is a portable, high-performance counter-drone system with 40W output and up to 2 km range. It covers multiple frequencies to counter various UAV types and offers a 2-hour battery life. Lightweight and ergonomic, it's ideal for mobile security, military use, infrastructure protection, and VIP security operations.

Handheld Jamming

Lightweight & Ergonomic

Max. 40 W Total Output

- Jamming Range** › Typ. 2 km
- Spatial Coverage** › Directional
- No. of Sectors** › 1
- Type of Antenna(s)** › Directional
- Reaction Time** › <1 s
- Jamming Type** › Manual
- Jamming Reactive Frequencies** › 1.6 GHz (10 W), 2.4 GHz (10 W), 5.2 GHz (10 W), 5.8 GHz (10 W), other bands on demand
- Operating Temp.** › -20°C - +60°C
- Weight** › Approx. 2.7k g
- Colors** › Black, white, olive, sand



AARTOS™ Unimog equipped with X9 RF drone detection and 360° fixed bands sector jammer



Versatile site protection with the mobile AARTOS™ XXL shelter

› DETECTION

Real-time spectrum monitoring and precision direction finding from 400 MHz up to 8 GHz

› RANGE

Up to 80 km detection range with 1° to 3° accuracy for Military UxS and 40 km for consumer grade drones

› SENSORS

RF geolocation tracking array combined with long range drone protocol decoding

› FORM FACTOR

Shelter-based 4x4 MIL-Spec Unimog with exceptional off-road capabilities and self-sustainability

4x4



AARTOS™ 4x4 MIL-Spec Unimog

The MIL-spec 4x4 Mercedes-Benz Unimog 5023, equipped with a detachable AARTOS™ Medium Shelter, is a robust and versatile solution for advanced UxS detection.

The compact shelter is outfitted with the IsoLOG® DF tracking array and long-range decoding antennas, ensuring precise direction finding and signal decoding. Inside, two operator seats with 4 4K displays and integrated air conditioning provide a comfortable and controlled workspace for extended missions.

The Unimog's exceptional off-road capabilities allow deployment in the most challenging terrains, while its self-sustaining design ensures reliable performance even in remote locations. This combination of mobility, durability, and advanced technology makes it an ideal choice for military and tactical operations requiring rapid deployment and high functionality.

✕	📦	👤👤	TRL	MRL
690x297x399 cm	9.6 Tons	2 Operators	9	10

Type	➤ Mercedes Benz Unimog 5023
Shelter	➤ Compact size
Sensor Fusion	➤ ❶ AARTOS™ X9
Sensors	➤ ❷ IsoLOG® DF, ❸ Long Range Decoding or 360° Sector Jammer
GPS	➤ ❹ External antenna, ❺ northfinder
Surveillance	➤ ❻ 360° surround view cameras
Air Conditioning	➤ 2x Dometic FW-3000B
Power Supply	➤ ❶ Diesel Generator 400 V/16A
Length	➤ 6.895 mm
Width	➤ 2.970 mm (incl. mirrors)
Height	➤ 3.985 mm (sensors retracted)
Max. Height	➤ 8.445 mm (sensors extended)
Gross Weight	➤ ~9.600 kg



› DETECTION

Real-time spectrum monitoring and precision direction finding from 400 MHz up to 8 GHz

› RANGE

Up to 80 km detection range with 1° to 3° accuracy for Military UxS and 40 km for consumer grade drones

› SENSORS

RF geolocation, 4D radar detection and EO/MWIR camera tracking ensuring maximum capabilities

› SMART JAMMING

Selective sector-based smart jamming across the entire frequency band of 400 MHz to 6 GHz

6X6



AARTOS™ 6x6 MIL-Spec Zetros

The MIL-spec 6x6 Mercedes-Benz Zetros, equipped with the AARTOS™ XXL Shelter, is a cutting-edge solution for electronic warfare and advanced drone detection.

Designed for demanding military operations, the XXL shelter features the IsoLOG® DF tracking array, long-range decoding antennas, 4D UAV radar, EO/MWIR tracking camera, and a 360° smart jamming system for comprehensive signal dominance and airspace control. Inside, the shelter provides four operator seats, air conditioning, and eight 4K displays, ensuring efficient mission management and operator comfort during extended deployments.

The Zetros' superior off-road capabilities and self-sustaining design make it ideal for operations in challenging environments and offers unmatched performance in spectrum dominance and counter-drone defense.



1120x297x399 cm



15.6 Tons



4 Operators

TRL

9

MRL

10

Type	➤ Mercedes Benz Zetros 2743 6x6
Shelter	➤ XXL size
Sensor Fusion	➤ ❶ AARTOS™ X9
Sensors	➤ ❷ IsoLOG® DF, ❸ Long Range Decoding, ❹ 4D UAV Radar, ❺ EO/MWIR Tracking Camera
Effectors	➤ ❻ 360° Smart Jamming
GPS	➤ ❼ External antenna, ❽ northfinder
Surveillance	➤ ❾ 360° surround view cameras
Air Conditioning	➤ 2x Dometic FW-3000B
Power Supply	➤ Diesel Generator 400 V/16A
Length	➤ 11.200 mm
Width	➤ 2.970 mm (incl. mirrors)
Height	➤ 3.985 mm (sensors retracted)
Max. Height	➤ 8.940 mm (sensors extended)
Gross Weight	➤ ~15.600 kg



› DETECTION

Real-time spectrum monitoring and precision direction finding from 400 MHz up to 8 GHz

› RANGE

Up to 80 km detection range with 1° to 3° accuracy for Military UxS and 40 km for consumer grade drones

› SENSORS

RF geolocation, 4D radar detection and EO/MWIR camera tracking ensuring maximum capabilities

› SMART JAMMING

Selective sector-based smart jamming across the entire frequency band of 400 MHz to 6 GHz

ARMORED

AARTOS™ 6x6 Armored Tatra

The MIL-spec 6x6 Armored Tatra Truck, equipped with the AARTOS™ XXL Shelter, is a rugged platform for electronic warfare and advanced drone detection.

Featuring the IsoLOG® DF tracking array, long-range decoding antennas, 4D UAV radar, EO/MWIR tracking cameras, and a 360° smart jamming system, it ensures full-spectrum dominance and airspace security. With STANAG 4569-certified protection against ballistics and mines, the Tatra safeguards operators and equipment in hostile environments.

The shelter includes four operator seats, air conditioning, and eight 4K displays for efficient mission management and extended operational comfort. Its superior off-road mobility and self-sustaining design enable reliable performance in rugged terrains, ideal for counter-drone and electronic warfare missions.



1080x297x362 cm



23.4 Tons



4 Operators

TRL

7

MRL

4

Type > Armored Tatra 6x6

Shelter > XXL size

Sensor Fusion > ❶ AARTOS™ X9

Sensors > ❷ IsoLOG® DF, ❸ Long Range Decoding, ❹ 4D UAV Radar, ❺ EO/MWIR Tracking Camera

Effectors > ❻ 360° Smart Jamming

GPS > External antenna, northfinder

Surveillance > ❼ 360° surround view cameras

Air Conditioning > 2x Dometic FW-3000B

Power Supply > Diesel Generator 400 V/16A

Length > 10.820 mm

Width > 2.970 mm (incl. mirrors)

Height > 3.625 mm (sensors retracted)

Max. Height > 8.440 mm (sensors extended)

Gross Weight > ~23.400 kg

SHELTER

› DETECTION

Real-time spectrum monitoring and precision direction finding from 400 MHz up to 8 GHz

› RANGE

Up to 80 km detection range with 1° to 3° accuracy for Military UxS and 40 km for consumer grade drones

› SENSORS

RF geolocation, 4D radar detection and EO/MWIR camera tracking ensuring maximum capabilities

› SMART JAMMING

Selective sector-based smart jamming across the entire frequency band of 400 MHz to 6 GHz



IsoLOG® DF



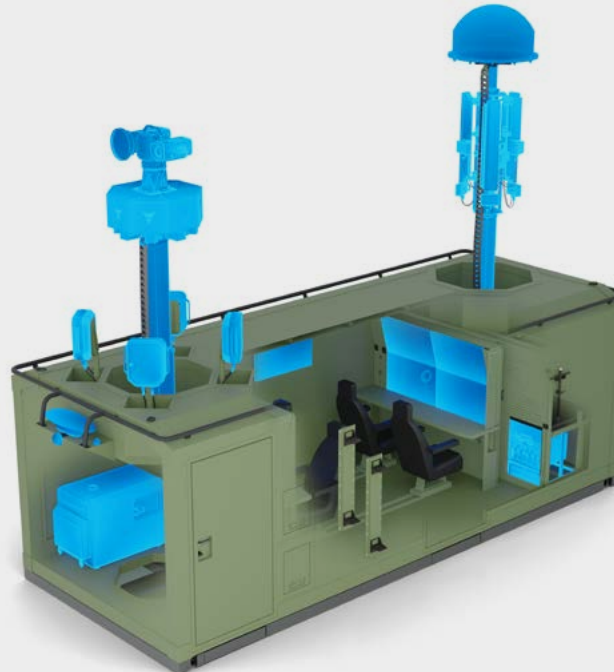
Decoding

AARTOS™ Compact Shelter

The **AARTOS™** Compact Shelter is a lightweight, highly portable solution designed for rapid deployment in dynamic environments. Equipped with a single extendable sensor mast, it provides advanced direction finding and long range decoding capabilities.

Inside, two operator seats are supported by four 4K screens, ensuring a streamlined and efficient operational workflow. Its compact design makes it easy to transport, ideal for missions requiring mobility and adaptability.

The shelter comes equipped with the **AARTOS™** X9 sensor fusion unit and integrated climate control for optimal performance. This version is perfect for teams needing a tactical, portable solution for drone detection and monitoring.



380x230x170 cm



4.3 Tons



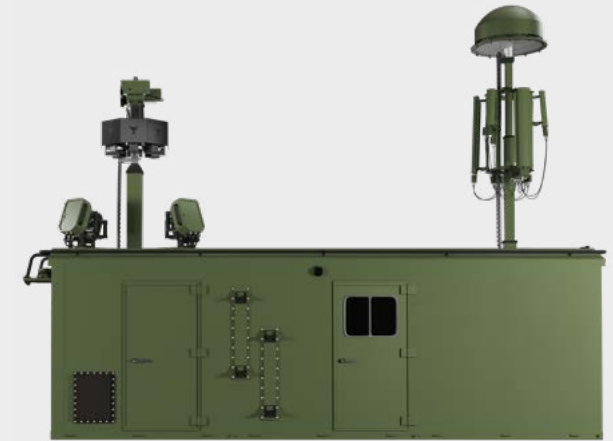
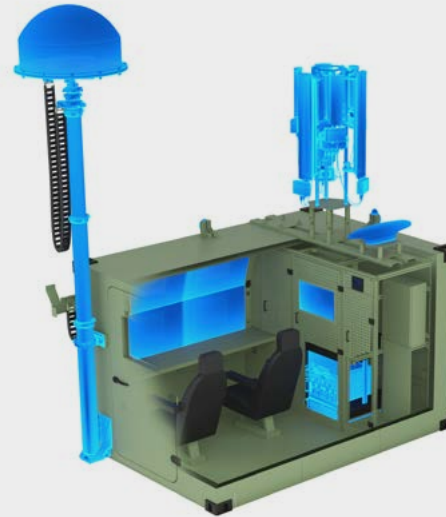
2 Operators

TRL

9

MRL

10



IsoLOG® DF



Decoding



Radar



Camera



Jamming

AARTOS™ Armored* XXL Size Shelter

The XXL size **AARTOS™** Shelter is the ultimate solution for large-scale, high-intensity operations, offering unmatched capacity and functionality. Featuring two extendable sensor masts, it supports direction finding, long range decoding, radar, camera Tracking, and jamming.

It is equipped with four operator seats and eight 4K screens, ensuring seamless coordination and analysis during complex missions. An inbuilt generator and separate hardware compartment provide independent, uninterrupted operation and optimized equipment management.

With the **AARTOS™** X9 sensor fusion unit and climate control, it is engineered for extended deployments in demanding environments. This shelter is ideal for military or defense teams requiring a robust, all-in-one system for maximum operational impact.



610x230x220 cm



8.1 Tons*



4 Operators

TRL

9

MRL

10

*optional armor upgrade, weight w/o upgrade

MAST

› DETECTION

Real-time spectrum monitoring and precision direction finding from 400 MHz up to 8 GHz

› RANGE

Up to 80 km detection range with 1° to 3° accuracy for Military UxS and 40 km for consumer grade drones

› SENSORS

RF geolocation and 4D radar detection or EO/MWIR camera tracking ensuring maximum capabilities

› EXTENSION

Semi-automatic mast extension up to 25 meters for optimal detection and tracking capabilities

AARTOS™ Trailer Mast

The AARTOS™ Trailer Mast is designed for rapid deployment and built with field-proven hardware to ensure reliable performance in demanding military operations. Fully off-road capable, this mast delivers exceptional precision and reliability, maintaining functionality even in rugged terrain.

Engineered to the highest quality standards, the mast ensures consistent data flow under harsh environmental and weather conditions. The 25 meter mast extension significantly enhances its effectiveness, making it an invaluable asset for detection and monitoring in hilly terrain or urban environments.



			TRL	MRL
624x240x285 cm	4 Tons	2 Operators	9	10

Type	Trailer Mast
Sensor Fusion	1 AARTOS™ X9
Sensors	2 IsoLOG® DF, optional EO/MWIR Tracking Camera or 4D UAV Radar
Effectors	Optional 360° Smart Jamming
GPS	External antenna
Power Supply	Diesel generator 400 V/16A
Inclination	± 1.0° – ± 1.5°
Torsion	≤ 0.5°
Operational Wind Speed	Max. 90 – 108 km/h
Max. Gradient	± 10°
Length	6.236 mm
Width	2.400 mm
Transport Height	2.850 mm
Deployed Height	25.100 mm
Gross Weight	~4.000 kg



FIXED SITE

AARTOS
FIXED SITE



AARTOS
FIXED SITE



AARTOS
FIXED SITE



› DETECTION

Seamless real-time detection of UxS emitters from 400 MHz to 8 GHz including ultra-short bursts

› RANGE

Up to 80 km detection range with 1° to 3° accuracy for Military UxS and 40 km for consumer grade drones

› SENSORS

RF geolocation, 4D radar detection and EO/MWIR camera tracking ensuring maximum capabilities

› SMART JAMMING

Selective sector-based smart jamming across the entire frequency band of 400 MHz to 6 GHz

AARTOS™ Fixed Site

The AARTOS™ Fixed Site solutions are designed to deliver superior detection and tracking capabilities for critical fixed installations. Built with field-proven hardware and engineered for continuous operation, these systems provide exceptional reliability in demanding military environments.

Capable of integrating multiple detectors, the systems offer enhanced coverage and precision, ensuring comprehensive situational awareness. Designed to maintain consistent data flow under harsh environmental and weather conditions, the systems guarantee dependable performance in even the most challenging scenarios.

Engineered to the highest standards, the AARTOS™ Fixed Site solution is an indispensable solution for mastering the spectrum and maintaining operational dominance.

		TRL	MRL
3000 m	4 Operators	9	10

Type	Fixed site
Sensor Fusion	1 AARTOS™ X7 or X9
Sensors	2 IsoLOG® DF, 3 Long Range Decoding, 4 4D UAV Radar, 5 EO/MWIR Tracking Camera
Effectors	6 360° Smart Jamming
GPS	External antennas
Network	LAN, fiberwire, radio relay, LTE
Grid Distance	~3000 meters
Number of Systems	Unlimited
Integration	Air-conditioned outdoor housings or 19" server racks
Operating Temperature	-20°C - +60°C (default)
Power Connection	400 V/16A





AARTOS™ C-UxS Compact Shelter 4x4 Unimogs and 25 meter masts



Flexible and scalable operator workstations



AARTOS™ Direction Finding stationary mesh nodes



AARTOS™ C-UxS stationary perimeter protection



AARTOS™ C-UxS 4x4 Mercedes Sprinter



AARTOS™ Direction Finding covert operations Mercedes-Benz V-Class

The AARTOS™ solutions family is designed with exceptional flexibility, offering full customization to meet the unique demands of any mission. This adaptability ensures the system can be tailored to specific operational needs, making it an indispensable asset for modern military and tactical operations. Its modular architecture supports seamless integration into a multitude of platforms, allowing forces to deploy it wherever required, regardless of space constraints or mission complexity.

AARTOS™ excels in versatility, capable of fitting into compact, covert vehicles such as pickup trucks or vans for low-profile operations. Additionally, scaled-down versions of the system can be integrated into existing military vehicles with minimal available integration space, ensuring its advanced capabilities are accessible even in resource-constrained environments. This makes AARTOS™ a practical solution for retrofitting existing fleets, maximizing operational utility without the need for major vehicle modifications.

Engineered for precision and reliability, AARTOS™ ensures robust performance across all platforms, even in the most demanding environments. Its scalable design enables operators to deploy the system effectively in urban settings, rugged terrains, or confined spaces, ensuring comprehensive airspace security. Whether for rapid response in covert scenarios or permanent installation in established assets, AARTOS™ delivers unmatched functionality and adaptability, providing customers with the edge in RF situational awareness.

For more information visit www.aartos-solutions.com



EUROPE | Niederösterreichische Landesregierung, Austria | Ministry of Defence, Austria | Border Control, Latvia | Ministry of Defence, UK | MOD DSTL, UK | Federal Politie, Belgium | Bulgarian Air Charter, Bulgaria | Estonian Defence Forces | Finnish Defence Forces | Cargolux Airlines, Luxembourg | Swedish Defense Research Agency | Portuguese Air Force | FMW Swedish Defense Material Administration | Swedish Armed Forces | Heathrow Airport | Cobra, Austria | Police, Malta | Turkish National Police | Police, Zyprius | **GERMANY** | BUND, Germany | Bundesamt für Polizei | Bundesamt für Sicherheit in Informationstechnik | Bundesamt für Verfassungsschutz | Bundesamt der Verteidigung | Bundeskriminalamt | Bundesnachrichtendienst | Bundesnetzagentur | Bundespolizeipräsidium | DFS – Dt. Flugsicherung | **WORLDWIDE** | Ministry of Defence, Indonesia | Air Forces, Thailand | Ministry of Defence, Australia | Gendarmerie Royale, Morocco | Ministry of Defence, Kenya | Ministry of Defence, Uganda | Ministry of Defence, Ruanda | Ministry of Defence, Ukraine



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MADE IN GERMANY

A horizontal bar with three equal segments of black, red, and gold, representing the German flag.