NiDAR™ X-JOC

SURFACE MOUNTED COMMAND STATION WITH INTEGRATED LONG RANGE UAS DETECTION AND COUNTERMEASURES

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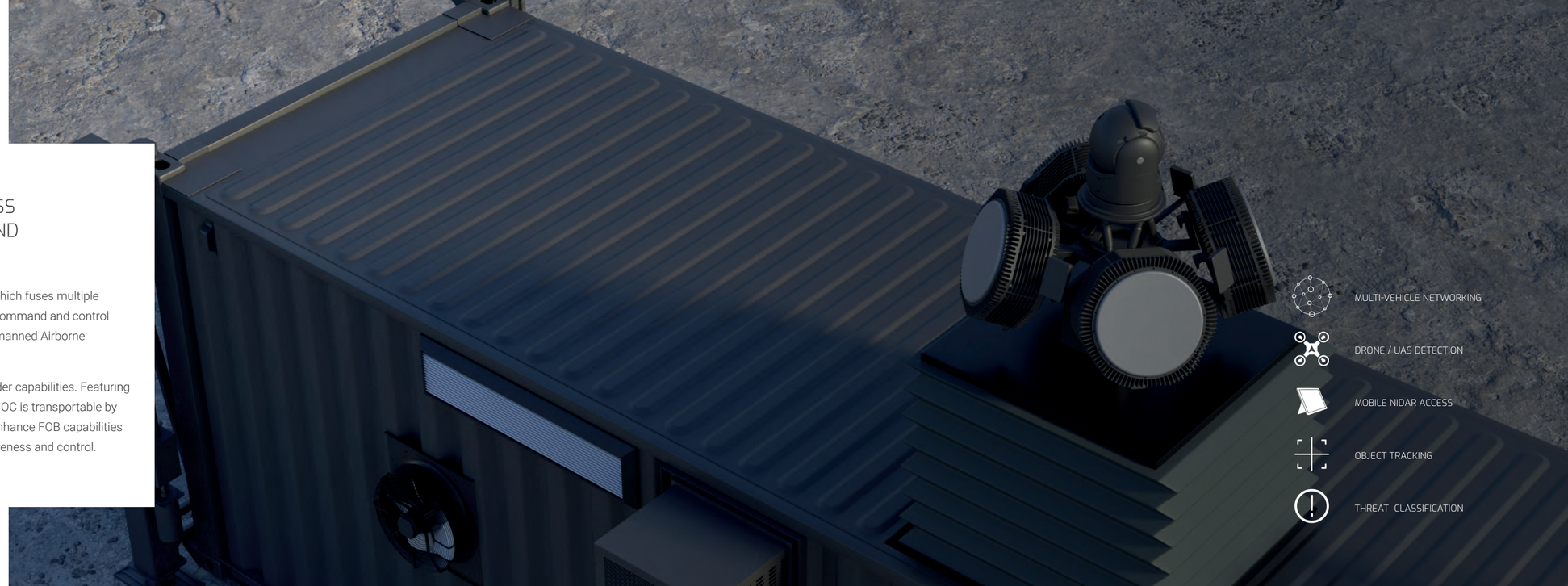
NiDAR™ X-JOC

AI POWERED MOBILE OPERATIONS

STATIC C2 UNIT WITH REMOTE CAPABILITIES, FEATURING ADVANCED TECHNOLOGY FOR SEAMLESS REMOTE SURVEILLANCE, FORWARD OPERATIONS AND RAPID RESPONSE TO HOSTILE EVENTS

Featuring MARSS NiDAR - our advanced AI platform powered by Hybrid Intelligence which fuses multiple sensors to create a single, accurate tactical picture - X-JOC is a fully-equipped static command and control unit designed to identify and neutralise land-based and airborne threats, including Unmanned Airborne Systems (UAS) and drones.

Available in 20ft and 40ft units, X-JOC is larger than other C2 solutions and boasts wider capabilities. Featuring interior housing for onboard command and control accommodating up to 4 users, X-JOC is transportable by land, sea or air and can operate independently, connect to multi-vehicle networks or enhance FOB capabilities with automated detection, alert, monitoring and countermeasures, for optimised awareness and control.



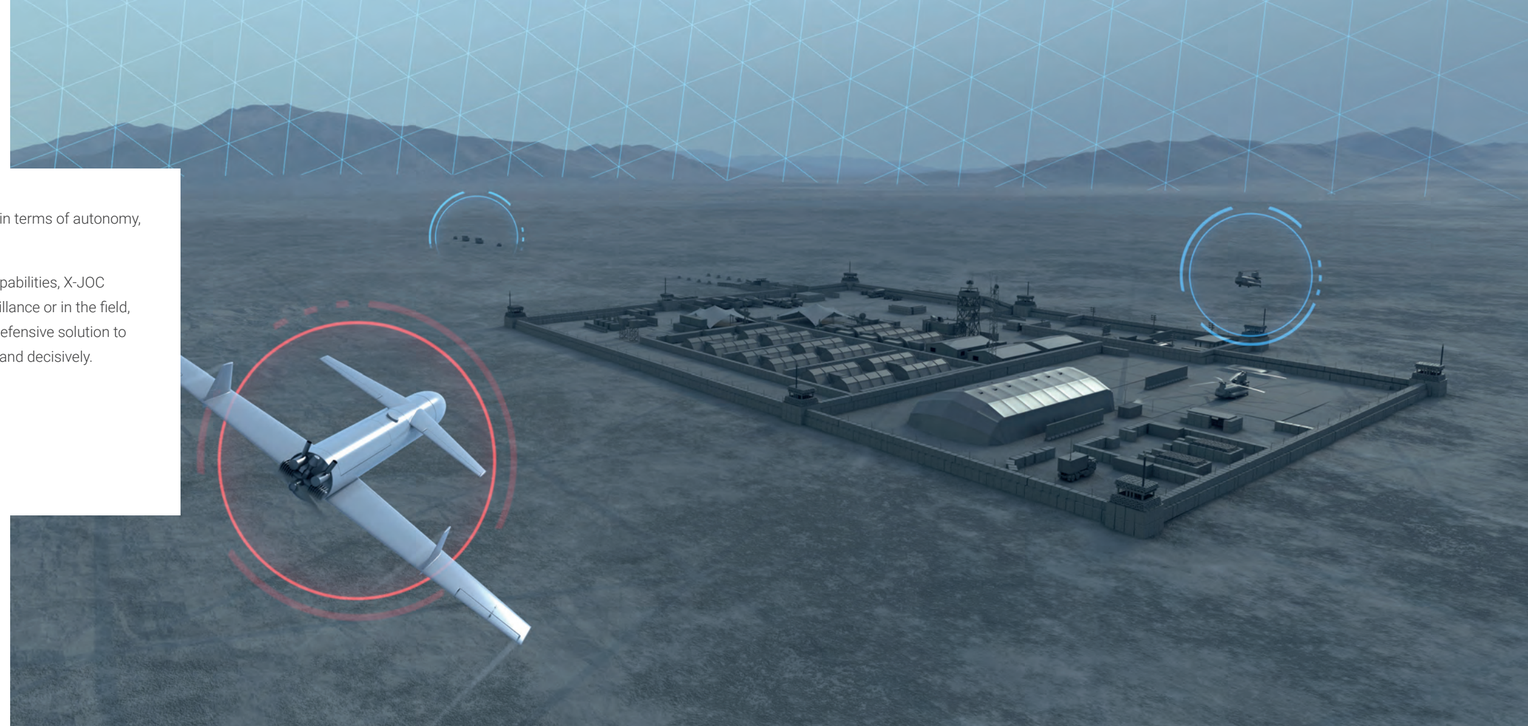
DEFEND AGAINST UNMANNED AIRBORNE SYSTEMS

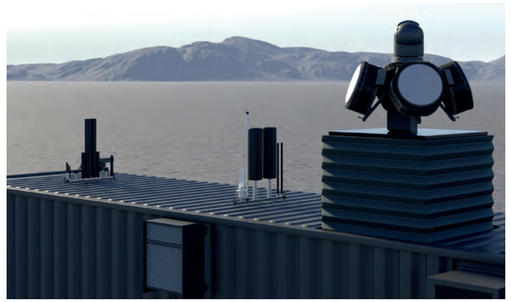
FROM PEOPLE, TO CRITICAL INFRASTRUCTURE AND ASSETS: HELPING YOU TO PROTECT WHAT YOU VALUE MOST

Unmanned Airborne Systems (UAS) are controlled remotely over long range and can strike in any domain, presenting an operational step-change in asymmetric warfare. Made from readily available, inexpensive tech and easily acquired by hostile forces, their autonomous hunt and attack capability makes them highly effective at exploiting gaps in conventional intel and surveillance, resulting in significant damage to infrastructure and strategic resources.

This threat continues to evolve in terms of autonomy, range, and destructive payload.

With advanced NiDAR CUAS capabilities, X-JOC can operate as perimeter surveillance or in the field, providing a long range mobile defensive solution to outsmart these threats, rapidly and decisively.





MODULAR AND ADAPTABLE

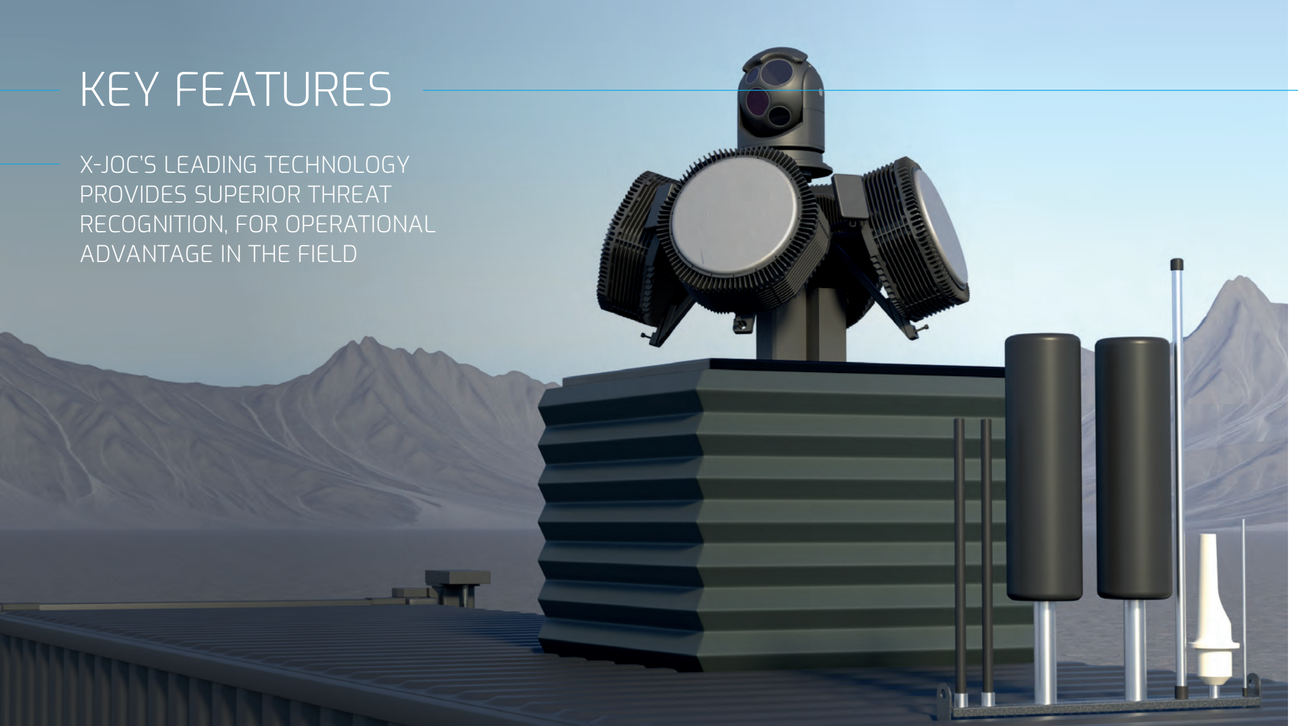
DESIGNED AND BUILT TO SPECIFICATION FOR MILITARY, SECURITY OR TACTICAL OPERATIONS

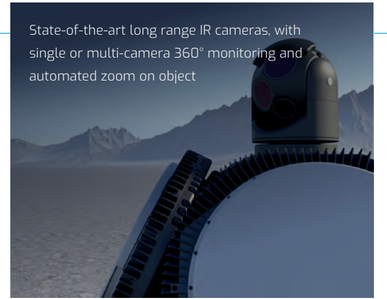
A modular, static C2 with integrated countermeasures, advanced capabilities and extensive detection reach, X-JOC is designed to be custom-built to meet your specifications: from sensor and hardware configuration to software and system programming and connectivity.

X-JOC is your mobile office, your remote command centre, meeting and briefing rooms, equipped with facilities and comfort for daily use, all day, 24/7.

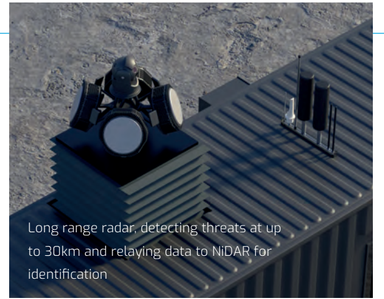
KEY FEATURES

X-JOC'S LEADING TECHNOLOGY PROVIDES SUPERIOR THREAT RECOGNITION, FOR OPERATIONAL ADVANTAGE IN THE FIELD

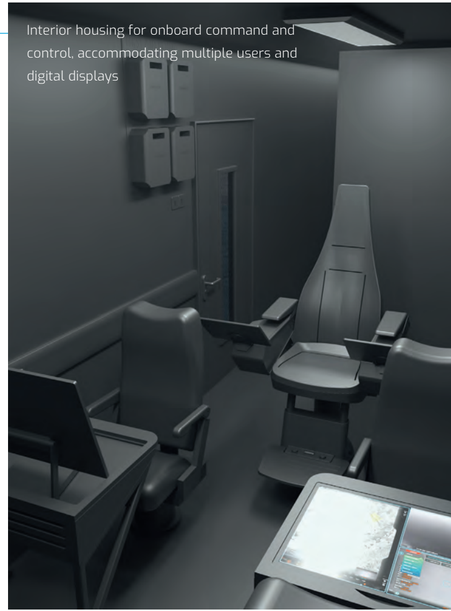




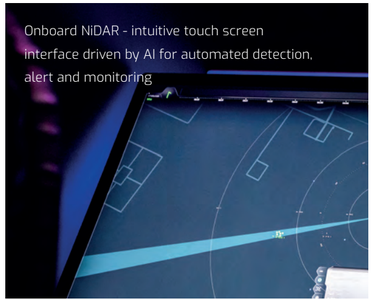
State-of-the-art long range IR cameras, with single or multi-camera 360° monitoring and automated zoom on object



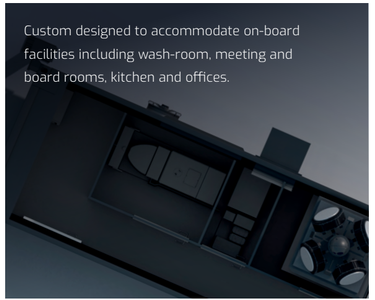
Long range radar, detecting threats at up to 30km and relaying data to NiDAR for identification



Interior housing for onboard command and control, accommodating multiple users and digital displays



Onboard NiDAR - intuitive touch screen interface driven by AI for automated detection, alert and monitoring



Custom designed to accommodate on-board facilities including wash-room, meeting and board rooms, kitchen and offices.

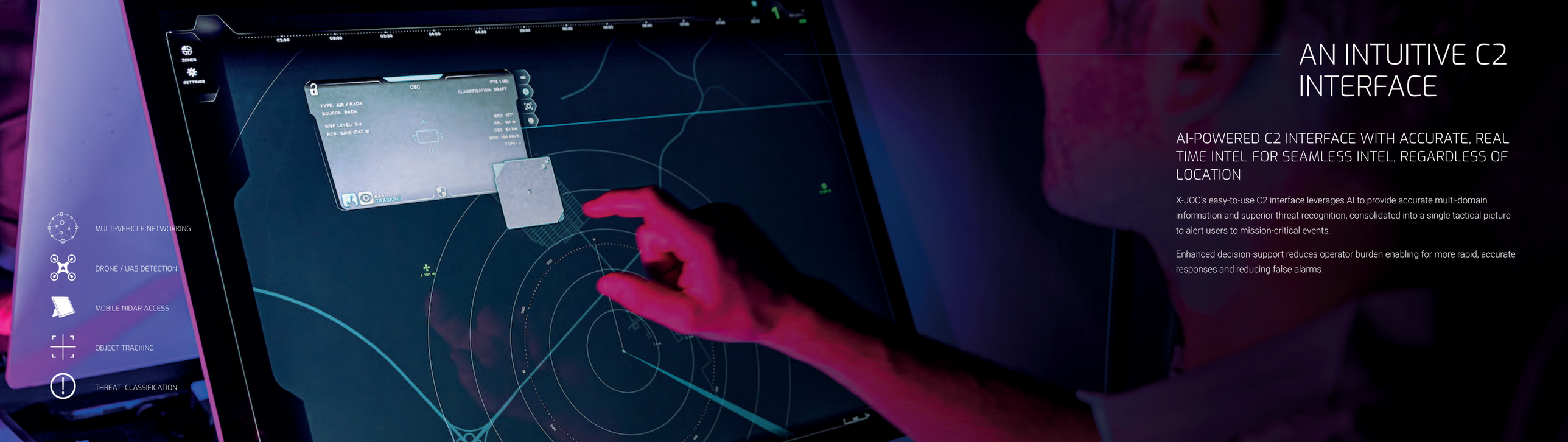
POWERED BY NiDAR CORE

THE AI-POWERED INTERNET OF THINGS (IOT) PLATFORM AT THE HEART OF ALL MARSS SOLUTIONS

Adaptable and learning. NiDAR CORE uses a combination of methods from many artificial intelligence disciplines, allowing the system to operate more intelligently than traditional software, more so than Machine Learning approaches, with improved safety, never compromising on quality.

NiDAR CORE exploits expertise through operational logic, data science, algorithms, video analytics, artificial intelligence, ergonomics and user experience (UX). Collectively, these aspects provide a single situational awareness picture to support operations. Integrated throughout our solutions to create a seamless network of systems operating towards one goal - the protection of lives, critical infrastructure and assets.

WE BELIEVE IN 'HYBRID INTELLIGENCE'. OUR SOLUTIONS COMBINE ARTIFICIAL INTELLIGENCE WITH TRADITIONAL ALGORITHMS AND HUMAN INTELLIGENCE TO CREATE AN UNRIVALLED IOT PLATFORM.



AN INTUITIVE C2 INTERFACE

AI-POWERED C2 INTERFACE WITH ACCURATE, REAL TIME INTEL FOR SEAMLESS INTEL, REGARDLESS OF LOCATION

X-JOC's easy-to-use C2 interface leverages AI to provide accurate multi-domain information and superior threat recognition, consolidated into a single tactical picture to alert users to mission-critical events.

Enhanced decision-support reduces operator burden enabling for more rapid, accurate responses and reducing false alarms.

LAYERED DEFENCE

MULTI-DOMAIN SURVEILLANCE, SITUATION ANALYSIS AND COUNTERMEASURE DEPLOYMENT FOR REAL WORLD SCENARIOS

DETECT

Long range radar and RF monitoring for superior detection reach of objects across land, surface and air. Live view of objects and accurate sensor diagnostics enables users to observe, monitor and protect assets.

IDENTIFY

NiDAR's proprietary AI uses advanced algorithms, video and behaviour pattern recognition, object data points, event history analysis, RF signal monitoring and environment reports such as weather, location, and flight schedules to identify objects.

ALERT & MONITOR

Continuous surveillance technology to classify and rank potential threats, minimising false alarms and reliably projecting outcomes.

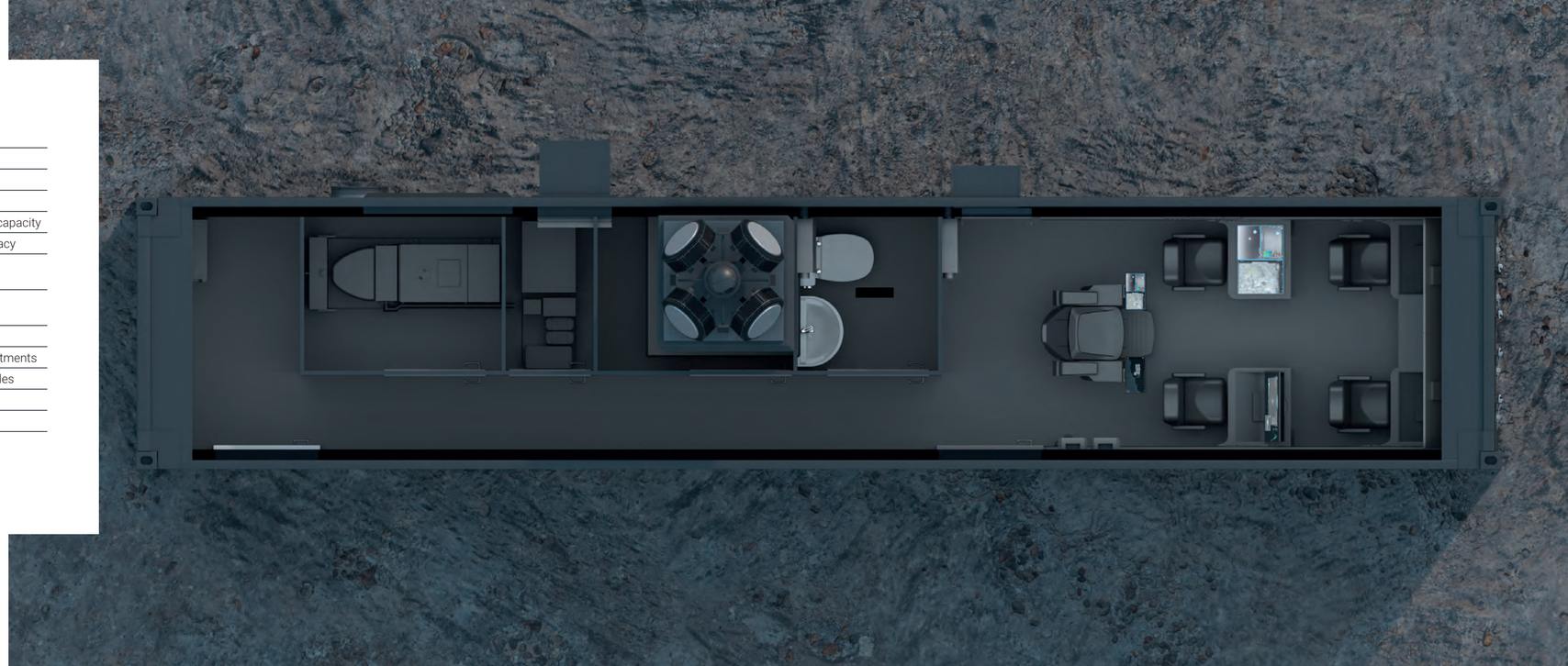
RESPOND

NiDAR's intuitive user interface platform provides X-JOC operators with response options and countermeasure recommendations. Onboard effectors include RF jamming, GPS jamming and connectivity to kinetic countermeasures for decisive elimination of threats.

TECHNICAL INFO

Dimension	20ft	6.10m x 2.44m x 2.59m (L x W x H)
	40ft	12.19m x 2.44m x 2.59m (L x W x H)
Weight	20ft	Circa 5 tons
	40ft	Circa 6.5 tons
Transport / logistics		Road / sea / air
Remote capability		Yes (on generator)
Generator capacity		36kW
Generator Autonomy (stand-alone)		10 to 20 hours (full load)
UPS		Yes (soft shut-down)
UPS autonomy		Circa 1 hour
Shore power connection		Yes
Air Conditioning capacity		Operator compartment: 2 x 4.7kW Rack compartment: 1 x 5.2kW
CCTV perimeter surveillance		4 cameras
Awning		Optional

Detection range	< 30km
Tracking range	< 8km
Jamming range	< 6km
Retractable mechanism	Scissor lift platform - 1000kg capacity
Levelling capability	Camera: +/-0.1 degrees accuracy
Deployment capability	From low bed truck with jacks No crane required
Remote communication	Client network Via satellite (optional)
C2 capability	Yes
Maintenance features	Access to roof and all compartments
Operator screens	2x 50" screens + 4x 26" consoles
Number of operators	4
Max number of people	4



LEADING DEFENCE TECHNOLOGY

HELPING NATIONS AROUND THE GLOBE PROTECT WHAT THEY VALUE MOST.

At MARSS, we are helping our customers to strengthen their defence & security and modernise their cities. Trusted globally, our systems protect millions of lives against a wide range of evolving threats from land, sea and air.

Driven by innovation, we are committed to investing in the research and design of new technology to save lives.

Our AI-powered IoT platform NiDAR fuses intelligence from multiple sources with the latest tech, sensors and countermeasures to create a single tactical picture for optimal situational awareness and control.

The continuous development of our NiDAR platform is helping to create smart and secure nations, and protecting against future threats, today.

MARSS is committed to making a difference and creating efficient and intuitive solutions to make the world a safer, and more intelligent, place to live.

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