



C-UAS

COUNTER-UNMANNED AERIAL SYSTEM



CONCEPT AND STRATEGY

MULTI-LAYERED C-UAS FORCE PROTECTION WITH ORGANIC WEAPONS AND SYSTEMS



Layer 1: Battalion Level

Centralised C-UAS defence node with 5 km detection and engagement capability

Layer 2: Company Level

Medium-range detection of up to 3 km and situational awareness

Layer 3: Vehicle Level

Close-in defence of up to 1 km using vehicles with add-on C-UAS systems

Core Layer: C2 Network

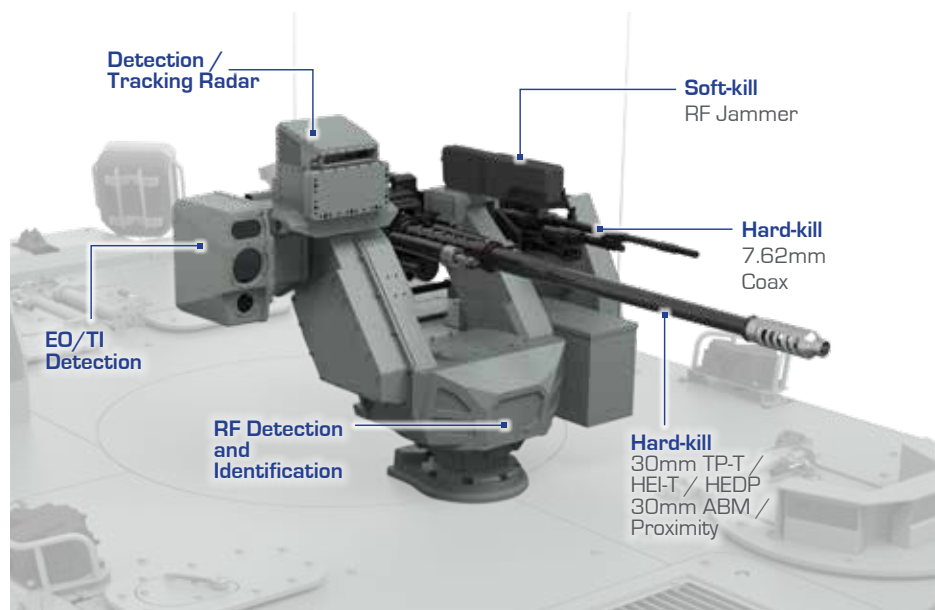
System-wide Command and Control hub, leveraging sensor fusion to integrate data across all layers, providing unified situational awareness, and enable intelligent response coordination

C-UAS SYSTEMS LAYERED FORCE PROTECTION

Layer 1: Battalion Level				
	On existing or dedicated platform for wide area situational awareness and early warning; with defeat capabilities			
	Layer 2	Detect	Disrupt	Defeat
	Range	5 km	2 km	2 km
	Solutions	RFDD & Radar	Jammer	Drone vs Drone
Layer 2: Company Level				
	With medium-range sensors and effectors for situational awareness and defeat			
	Layer 2	Detect	Disrupt	Defeat
	Range	3 km	1 km	1 km
	Solutions	RFDD & Radar	Jammer	30 mm ABM
Layer 3: Vehicle Level				
	Equipped with short-range detectors and effectors			
	Layer 2	Detect	Disrupt	Defeat
	Range	1 km	0.3 km	1 km
	Solutions	RFDD & Radar	Jammer	30 mm, 40 mm, 7.62 mm
CORE LAYER: C2 Network				

COUNTER-UNMANNED AERIAL SYSTEM (C-UAS)

The C-UAS Remote Weapon Station (RWS) integrates advanced detection and engagement technologies for counter-drone operations. Featuring radar and RF detection, it extends the RWS's range to 1 km, enabling the detection and tracking of drone swarms. The Electro-Optical (EO) system uses sensor data to accurately identify and engage the targets. The system supports both hard-kill and soft-kill capabilities, including an RF jammer for non-lethal neutralisation.

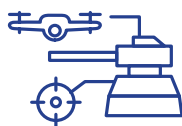


KEY FEATURES



Modular and Scalable

Can be added to existing platforms as an add-on kit, enhancing capabilities against drone clusters without compromising the original RWS functionality.



Versatile with Dual-use Capability

Integrated radar supports both drone detection and battlefield surveillance, with the versatility to seamlessly switch between anti-drone and conventional munitions, ensuring adaptability for a wide range of mission scenarios.



Seamless Ecosystem

Fully integrated into the gunner station, allowing detection, tracking, and engagement through a single interface. Its advanced automation capabilities reduce the operator's cognitive workload, boosting operational efficiency and minimising training time, even with the addition of new features.

C-UAS MAST

The Counter-Unmanned Aerial System Mast (C-UAS MAST) is a versatile counter-drone solution equipped with radar and RF detectors for early drone detection at long ranges. It can be mounted on Unmanned Ground Vehicles (UGVs) or fixed infrastructure, making it adaptable for various tactical operations.

KEY FEATURES



Seamless Ecosystem

Enhances operational efficiency and reduce training time with just a single interface to manage detection, tracking and neutralisation.



Scalable and Future-Proof

Enables the integration of additional sensors and system upgrades to maintain relevance against evolving drone threats.



Data-driven Sensor Fusion

Utilizes advanced sensor fusion techniques to combine multiple sensor inputs, boosting performance and classification accuracy.



TECHNICAL SPECIFICATIONS

	ADDER		PLATFORM	
	Detect	Defeat	Detect	Defeat
Layer 1 [5 km]			Max Radar	Pro Dir-Jammer
Layer 2 [3 km]	RFDD Pro Radar		RFDD Pro Radar EO	Max Dir-Jammer
Layer 3 [1 km]	Basic RFDD Basic Radar	Others Handheld Laser Basic Omni-Jammer Basic Dir-Jammer	RFDD Basic Radar EO	Basic Omni-Jammer Basic Dir-Jammer Laser RWS

	Item	Range	Power [w]	Size [mm]	Weight [kg]
Detector	Basic RFDD	300 m	80	280 x 175 x 95	<6
	RFDD	3 km	30	350 x 220 x 80	<10
	EO	3 km	70	260 x 260 x 550	<15
	Basic Radar	1.8 km	140	190 x 330 x 110	<10
	Pro Radar	4.5 km	450	310 x 550 x 110	<20
	Max Radar	7 km	880	420 x 700 x 130	<30
Effector	Basic Omni-Jammer	<1 km	950	480 x 330 x 240 220 x 220 x 440	<35
	Basic Dir-Jammer	600 m	480	330 x 240 x 140 280 x 90 x 60	<15
	Max Dir-Jammer	3 km	850	250 x 220 x 750	<30
	Pro Dir-Jammer	5 km	950	480 x 330 x 400	<35
	Handheld Laser	500 m	500	684 x 300 x 108 400 x 410 x 165	<15
	Laser	1 km	2000	800 x 1200 x 2100	<700

Note: Specifications are subject to change by the manufacturer without prior notice. Pictures shown are for illustrative purposes only, actual product may vary.

