HALCON

TACTICAL UGV-2

EMPOWERING THEFUTURE OFWARFARE

The 8x8 Tactical UGV is designed for military application where it can operate in hazardous environments and remotely controlled by a human operator from the ground control station. The system is armed with Hunter 2S launcher, ADAM Remote Control Weapon Station (RCWS) and equipped with other specialized equipment, sensors, communication system, and GMBAL 270 sight system for specific missions. The automatic mode of the tactical UGV increases its flexibility and adaptability for different mission scenarios in outdoor environments.

ADAM RCWS is integrated on the UGV which allows the user to engage with enemy targets and provide covering fire for troops. ADAM RCWS includes a FN Minimi machine gun which allows the tactical UGV to be operated remotely and used in hazardous environments or in situations where human presence would be dangerous.

SPECIFICATIONS

UGV type	8x8 electric vehicle
Weight of UGV (empty)	600-700 kg
Maximum payload	2 tons
Speed	20 km/h
Dimensions	1.5 x 3.1 x 0.9m
Communication	5 km line of sight, 4G/5G + WIFI, Unlimited range using Sims
Power	8,000W

SUB-SYSTEMS INTEGRATED

ADAM

HUNTER 2S Launcher

GIMBAL 270



SYSTEM DESCRIPTION

ADAM Remote Control Weapon Station (RCWS) is integrated on a UGV which allows the user to engage with enemy targets and provide covering fire for troops. ADAM RCWS includes a FN Minimi machine gun which allows the tactical UGV to be operated remotely and used in hazardous environments or in situations where human presence would be dangerous.

SYSTEM FEATURES

Lightweight Aluminum system (approximately 72 kg)
One remote operator
360° rotation

FN Minimi M249 (machine gun)

 -15° + to $+40^{\circ}$ elevation



WEAPON

Weapon caliber:	5.56 mm
Ammunition capacity:	200 rounds belt feed

TECHNICAL SPECIFICATIONS

Total height:	900 mm
Diameter:	Ø 1.1m around AZ pivot point

OPERATIONAL LIMIT

Operational environment:	-10° to +55°
No-go Areas:	Pre-programmable Fire Inhibit Zones
Operational coverage:	Nx360° (AZ) and -15° to +40° (EL)

SYSTEM DESCRIPTION

Hunter 2S is a tactical drone that can be deployed in swarm. The unmanned aerial vehicle (UAV) is equipped with artificial intelligence (AI) technology that enables it to share information with other drones within the swarm. The swarming drones are able to track and maintain their relative positions to perform coordinated missions that effectively overwhelm adversaries.

Carrying a payload up to 2 kg, these ground launched swarming drones can reach a cruising altitude of $500 \, \text{m}$ and are suitable for recon and offensive missions, operating at a cruising speed of $90 \, \text{km/h}$, with an endurance of $45 \, \text{m}$ inutes. The drone features a wingspan of $2.2 \, \text{m}$, a length of $1.5 \, \text{m}$ and is run by an electric engine.

The hunter 2S tube launcher can be fitted on the back of an armored/artillery vehicle, enabling all 64 drones to be launched in a period that does not exceed 5 minutes.

SPECIFICATIONS

Wingspan	2.2 m
Length	1.5 m
Drone takeoff weight	up to 13 kg
Drone weight including canister	up to 27 kg
Payload	2 kg including fuse/SAD
Cruising speed	90 km/h
Engine	Electrical engine
Endurance	45 minutes
Communication range	50 km
Operational altitude	1,640 ft
Maximum altitude	3,000 ft
Launcher weight	4 metric tons
Launcher elevation	up to 45°



FEATURES

Two Axis multi-sensor stabilized imaging system

Designed to be installed on Unmanned Ground Vehicle (UGV)

Gimbal is equipped with uncooled thermal camera, CCD, 100mm fixed focal length CCD and LRF

Used for target acquisition, target aiming and fire guidance

Total system weights around 12 kg's

SIGHT SYSTEM ROTATION RANGE

Azimuth: N×360°

Pitch angle: 30°+60°

ENVIRONMENTAL CONDITIONS

Operating Temperature: -40 to 60 °C

Storage Temperature: -55 to 70 °C

Shock MII-STD-810F

Vibration MII-STD-810F

POWER CONSUMPTION

Power supply: 19V to 34V

Consumption: <100W (standard); 300W (Max)

STABILIZATION PROFILE

Accuracy:	0.1 mrad
Angular rate:	1 rad/s
Angular acceleration:	1 rad/s ²

AUTO TRACKER

Target type: Static, moving and non-rigid targets

Extra features: Partial target obscuration

Temporal memoryScale and perspective tolerance

IMAGE SENSOR

Sensor resolution and	Full HD CMOS Image Sensor.
optical format:	1/2.6" Optical format
Angle of view (D/H/V):	9.3°/6.2°/4.5°
Lens focal length:	50.0 mm (fixed focus)

THERMAL CAMERA

Field of view: 24.6x18.5 / 7.3x5.5

Detection distance:

Human: 2.6 km Vehicle: 5.5 km

Recognition distance:

Human: 0.7 km Vehicle: 1.8 km

FIRST DAYLIGHT CAMERA

Field of view: 4.12°x 2.32°

Detection distance:

 Human:
 4.2 km

 Vehicle:
 10.22 km

Recognition distance:

Human: 1.41 km Vehicle: 3.41 km

SECOND DAYLIGHT CAMERA

Field of View: 2.3°-63.7°

O-Zoom: 30x

LASER RANGE FINDER

Accuracy:

Distance: ≥6km (for 2.3 m x 2.3 m Target)

Min. measurement range: 50m

±1m

