Desert Sentinel Systems stands for a next-generation security brand delivering intelligent, modular counter-drone and airspace protection technologies — engineered for the harshest desert environments, trusted by military and government partners

DESERT SENTINEL
systems security

Product category

SMART DRONE SERIES

DESERT SENTINEL
systems security

SMART DRONE SERIES

SUNFLOWER200

Long Distance Smart Patrol Drone
Take off by Undercarriage or Rocket Booster
Landing by Undercarriage
AI Thermal &Visible Seeker

DESERT SENTINEL
systems security

SMART DRONE SERIES

SUNFLOWER200

Product parameters

Wingspan	2.67m
Length	3.2m
Payload	50kg
Combat radius	1000~1500km
Flight speed	120~200km/h
Flying time	10hours
Flight altitude	5000m
Fuel tank capacity	100L
Take-off mode	undercarriage and launcher
MTOW	190kg

DESERT SENTINEL
systems security

SMART DRONE SERIES

8G VIDEO+DATA LINK

8GVideo+Data Link	
Interface	21-core J30 interface: 100Mbps Ethernet port RJ45 (4 pin) DC power supply interface (6 pin) SBUS / TTL / RS232 (could be customized)
	RF interface SMA-K (MESH)
Indicator Lights	4-level network quality indication
Wireless specifications	7900~8000Mhz
Output Power	33dBm
Receiving sensitivity	-100dBm
Channel bandwidth	1.25MHz/2.5MHz/5MHz/10MHz

DESERT SENTINEL
systems security

SMART DRONE SERIES

8G VIDEO+DATA LINK

Performance Parameters	
Networking	Ad Hoc Network
Anti-interference	Intelligent frequency selection; optional fast frequency hopping (1000 hops/second)
Peak rate	25Mbps
Relay hop count	More than 10 hops, single hop delay < 10ms
Number of nodes	32; 64/128 nodes optional
Start Time	<35s
Transmission encryption	AES 256

Hardware Parameters	
Dimension	200*80*70mm
Weight	1.2KG
Antenna	Aircraft standard 2dBi omnidirectional fiberglass antenna
	Standard 5dBi omnidirectional fiberglass antenna on the ground
power supply	DC 28V; Optional DC 12V
Power consumption	Peak 30W
Operating temperature	(-40°C to 65°C)
Working humidity	10% to 90% non-condensing
Installation	Airborne

DESERT SENTINEL
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SMART DRONE SERIES

H13 GROUND ATTACK PATROL DRONE

Payload	800g
Cruising speed	130km/h
Combat radius	30km
Endurance	30min
Flight altitude	700m
Seeker	Visible light/infrared
Launch method	Launcher
Weight	3.5kg
Dimension	792x116x116mm

DESERT SENTINEL
systems security

SMART DRONE SERIES

S1800 OIL-POWERED VTOL COMPOSITE WING UAV

Product parameters

Payload	800g
Cruising speed	130km/h
Combat radius	30km
Endurance	30min
Flight altitude	700m
Seeker	Visible light/infrared
Launch method	Launcher
Weight	3.5kg
Dimension	792x116x116mm

DESERT SENTINEL
systems security

SMART DRONE SERIES

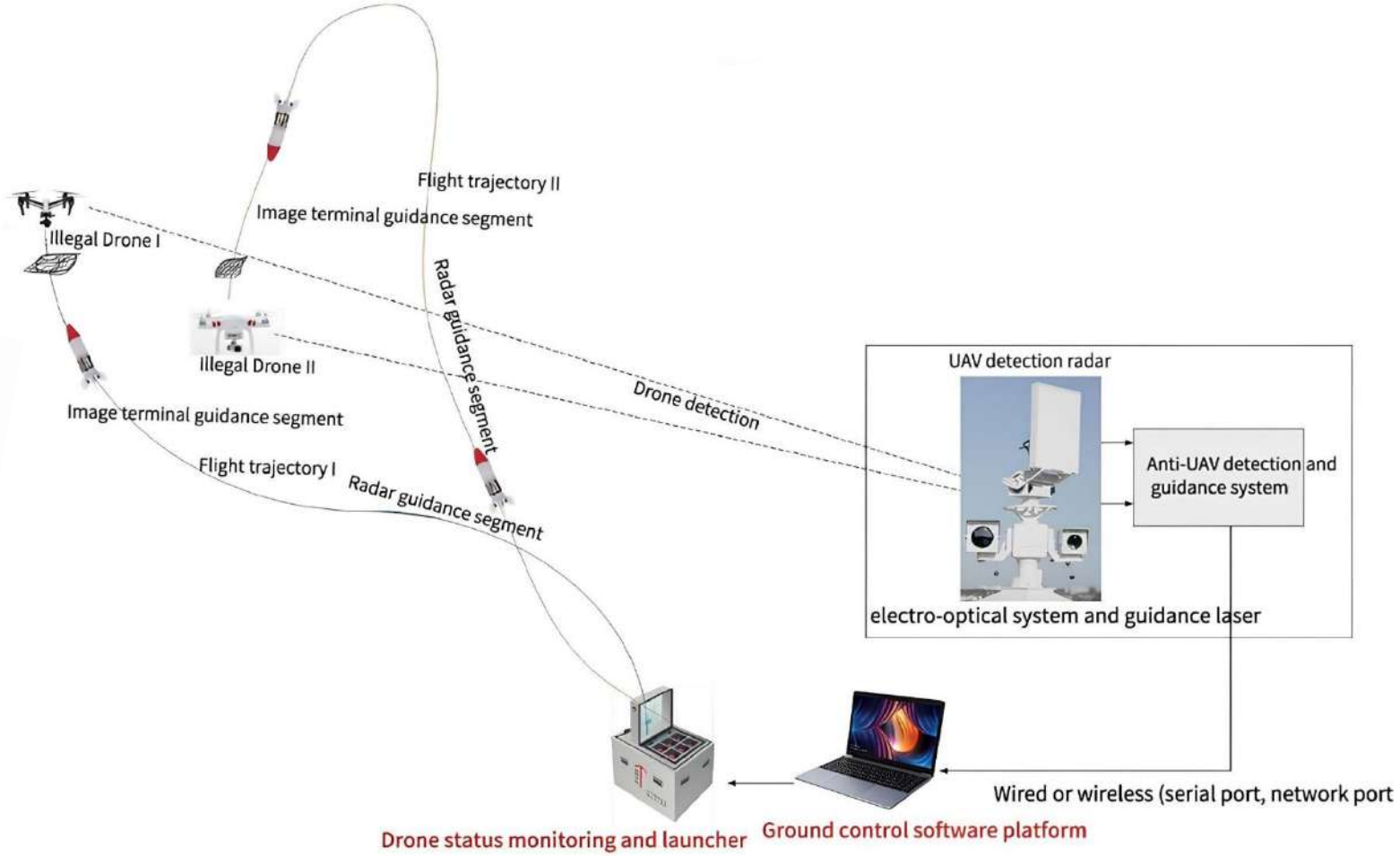
S1800 OIL-POWERED VTOL COMPOSITE WING UAV

Oil-powered VTOL composite wing UAV

DESERT SENTINEL
systems security

SMART DRONE SERIES
DRAGON70 ANTI DRONE ROCKET UAV

Anti Drone Rocket UAV



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systems security

SMART DRONE SERIES

DRAGON70 ANTI DRONE ROCKET UAV

Product parameters

Payload	300g
Flight speed	65m/s
Combat radius	5km
Endurance	150s
Flight altitude	3km
Launch method	Launcher
Weight	1.3kg
Dimension	472xϕ112mm

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SMART DRONE SERIES

SUNFLOWER100 PATROL DRONE

DESERT SENTINEL
systems security

SMART DRONE SERIES
SUNFLOWER100 PATROL DRONE

Product parameters

Wingspan:1.8m;Length:1.6m;Height:0.3m;	
Diameter of the drone head	0.2m
Data transmission distance	55KM
Max fly distance(battery)	150km/500km(with engine)
Empty weight	11.5kg
Cruising speed	28m/s
Payload	3kg
Fly altitude	1500m
Launch method	Catapult takeoff
Anti-interference capability	Multi-frequency GNSS antenna (replaceable anti-interference,antenna) Active radio silence
Number of guide head axes	two axes

Identification method	automatic identification, tracking
Guidance method	image guidance/satellite guidance
Anti-blocking ability	3s
Endurance(battery)	90min
Enndurance (50cc engine)	5hours

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systems security

SMART DRONE SERIES

MAX30K FIREFIGHTING DRONE

The fire-fighting drone can carry water guns, dry powder fire-fighting bombs, small buckets, etc. to perform fire-fighting operations. The load is ≥30kg, the number of casting points is ≥2, and the operating temperature is ≥150℃. The maximum no-load flight time is ≥35min, the load is 30kg, the flight time is ≥ 12min, and the control distance of the remote controller is ≥2km; the module supports quick-plug and quick-change casting, supports three-stage casting, and the total casting weight is 30kg.

X30 firefighting drone platform 30kg load, under-hook load, multi-functional application, foldable and portable M30 is made of carbon fiber, nylon fiber and aluminum alloy materials to form a modular design structure, which is sturdy and durable.

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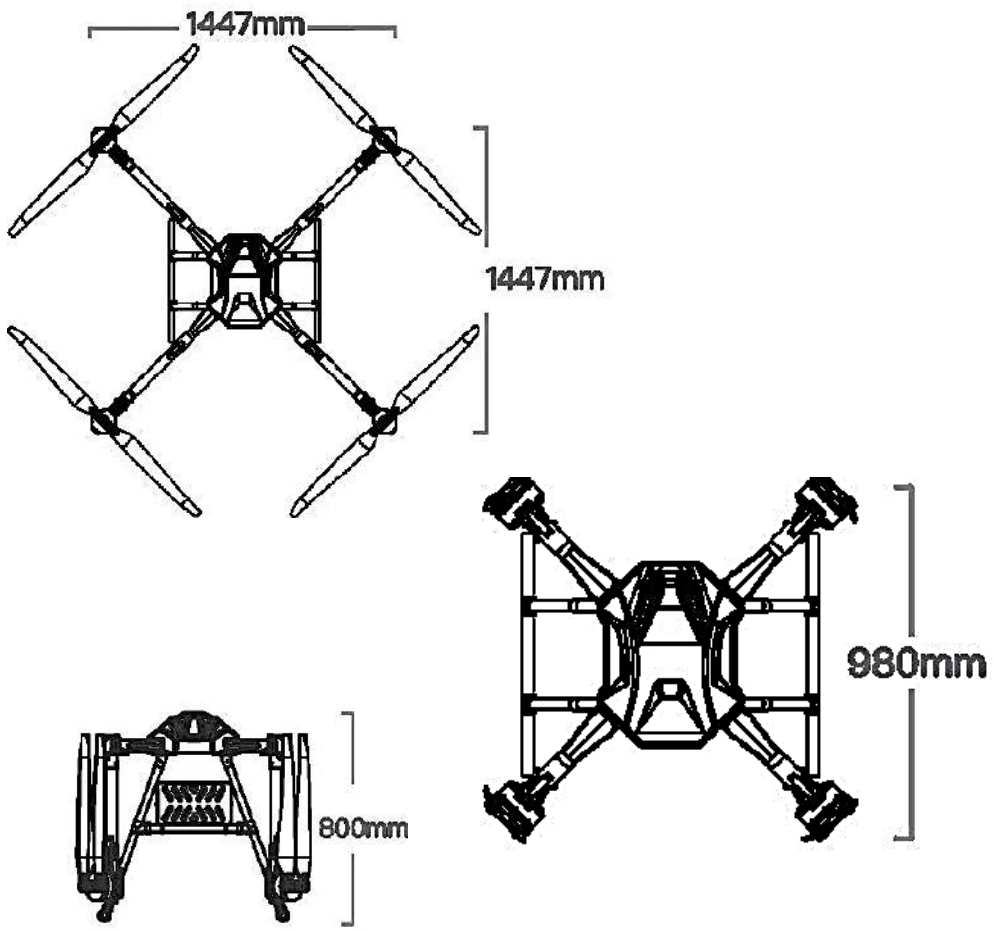
SMART DRONE SERIES

MAX30K FIREFIGHTING DRONE



Wheelbase	1860mm
Expanded size	1447x1447x800mm
Folded size	980x980x800mm
Weight	22.4kg(w/o battery)
Payload	30kg
MTOW	84kg
Flight control	Industrial flight control system
Ascent speed	5m/s
Flight speed	8-15m/s
No-load flight time	60min
Full-load flight time	20min
Operating voltage	58.8V(14s)
Battery capacity	66000mAh*2
Material	Carbon fiber, Nylon, Aluminum alloy

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SMART DRONE SERIES

MAX50K LOAD-CARRYING UAV

Application areas:

Police Law enforcement

Firefighting

Material transportation

Emergency rescue

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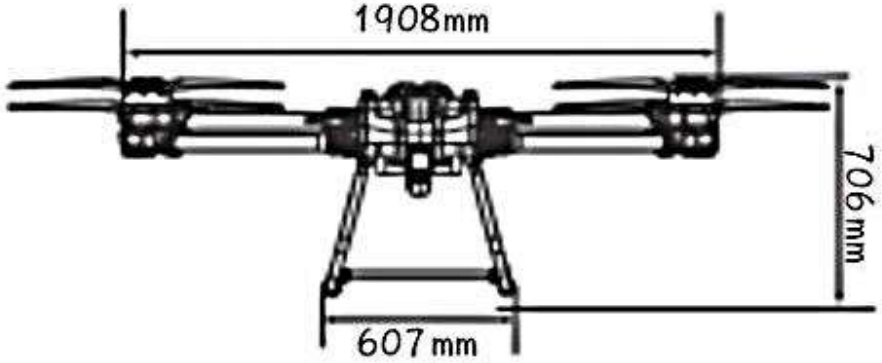
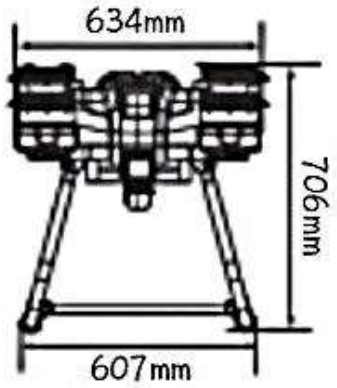
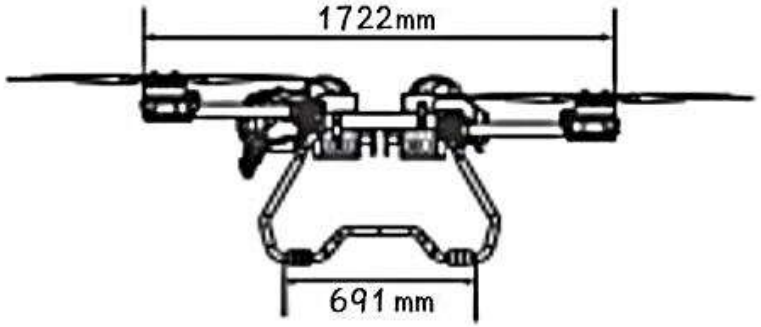
systems security

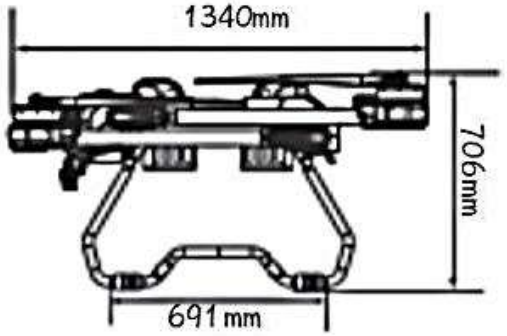
SMART DRONE SERIES

MAX50K LOAD-CARRYING UAV









Product wheelbase	2300mm
Folding size	635*1340*706mm
The weight of an empty drone	30kg
Flight speed	8-15m/s
Altitude	3000m
Flight control system	Industry flight control
No-load time	50min
Body material	Carbon fiber/Nylon fiber/aluminum alloy
Storage method	The boom is folded horizontally
Expand size	1905*1720*706mm
Working voltage	58.8V(18S)
Load	50kg
Climbing speed	3-5m/s
Maximum takeoff weight	115KGS
Battery capacity	18s 72000mah*2
Full-load flight time	40min
Waterproof grade	IP54
Working temperature	-40°C~50°C

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SMART DRONE SERIES

DC6 MULTI-PURPOSE HEAVY-LIFT DRONE

Machine type	6-rotor
wheelbase	2560mm
Blade size	56inch
load	50~65kg
Maximum take-off weight	130kg (load 50kg)
Flight speed	1-20m/s
Flight control system	FY Industry Edition
Positioning accuracy	±1.0m
Figure data transmission distance	5-10km
Wind resistance	> Level 7
battery	18S lithium battery

DESERT SENTINEL
systems security

SMART DRONE SERIES

DC6 MULTI-PURPOSE HEAVY-LIFT DRONE

Battery voltage	66.6v
Battery capacity	200000 mAh
Operating temperature	- 40 ℃ ~ + 60 ℃
Flight time	50min (load 50kg)
Cruising range	40km (load 50kg)
other	Driving mode GPS/ Attitude stabilization /Route Protection type: One key return/ out of control return/out of control hover/ low voltage alarm

DESERT SENTINEL
systems security

SMART DRONE SERIES

MAX50Y HYBRID GAS-ELECTRIC ROTARY WING DRONE

The MAX50Y UAV system is a large-load oil-powered rotor UAV system with universal mounting capabilities. The platform can carry a variety of payload equipment, and can realize tasks such as aerial video data collection and real-time feedback, emergency rescue, aerial throwing, plant protection, and forest protection.

The UAV system has the characteristics of large load, stable performance, high reliability, strong environmental applicability, high integration, and simple use among similar products. It can achieve fully autonomous take-off and landing, cruising capabilities, dual redundant flight control systems, and multiple safety control strategies to ensure the safety and reliability of flight use.

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SMART DRONE SERIES

MAX50Y HYBRID GAS-ELECTRIC ROTARY WING DRONE

Symmetrical wheelbase	2220mm
Expanded size(w/o propeller)	2220x2220x1300mm
Folded size	1180x1180x1300mm
Weight	65kg
Fuel tank capacity	25L
Max load	50kg
MTOW	125kg

Integrated control handheld ground station	H16 integrated remote controller can transmit/display pod/FPV images in real time; remote manual/program control of drone flight is possible;
Maximum climbing speed	8m/s
Maximum descent speed	3m/s
Maximum fly speed	15m/s
Endurance	90min@50kg load
Control distance	15km
Applicable altitude	3000m
Maximum wind resistance	12m/s
Power	gas-to-electric engine, 430CC twin-cylinder two-stroke water-cooled, power 18kw
Fuel	95# gasoline

DESERT SENTINEL
systems security

SMART DRONE SERIES

S-1000 SUPERSONIC JET ENGINE TARGET DRONE

Maximum level speed	⩾300m/s
Maximum flight altitude	⩾12500m(Altitude)
Minimum flying altitude	⩽50m(Relative altitude)
Maximum control radius	⩾300km (Through the conditions)
Endurance time	⩾60min, maximum range ⩾800km (no load)
Maximum load	⩽50KG
Take-off mode	Rocket booster zero-length launch
Recovery mode	Airbag damper parachute drop recovery
Uav RCS	⩽ 0.01m-3m ^{2} (c, s, x, ku, ka, etc., adjustable)
Operating temperature	-55℃~ +65℃
Maneuvering overload capacity	4g~9g
Maximum take-off weight	⩾260KG
Maximum take-off wind speed	⩾12M/S

It has the ability to control formation flight of no less than 10 UAVs at one station

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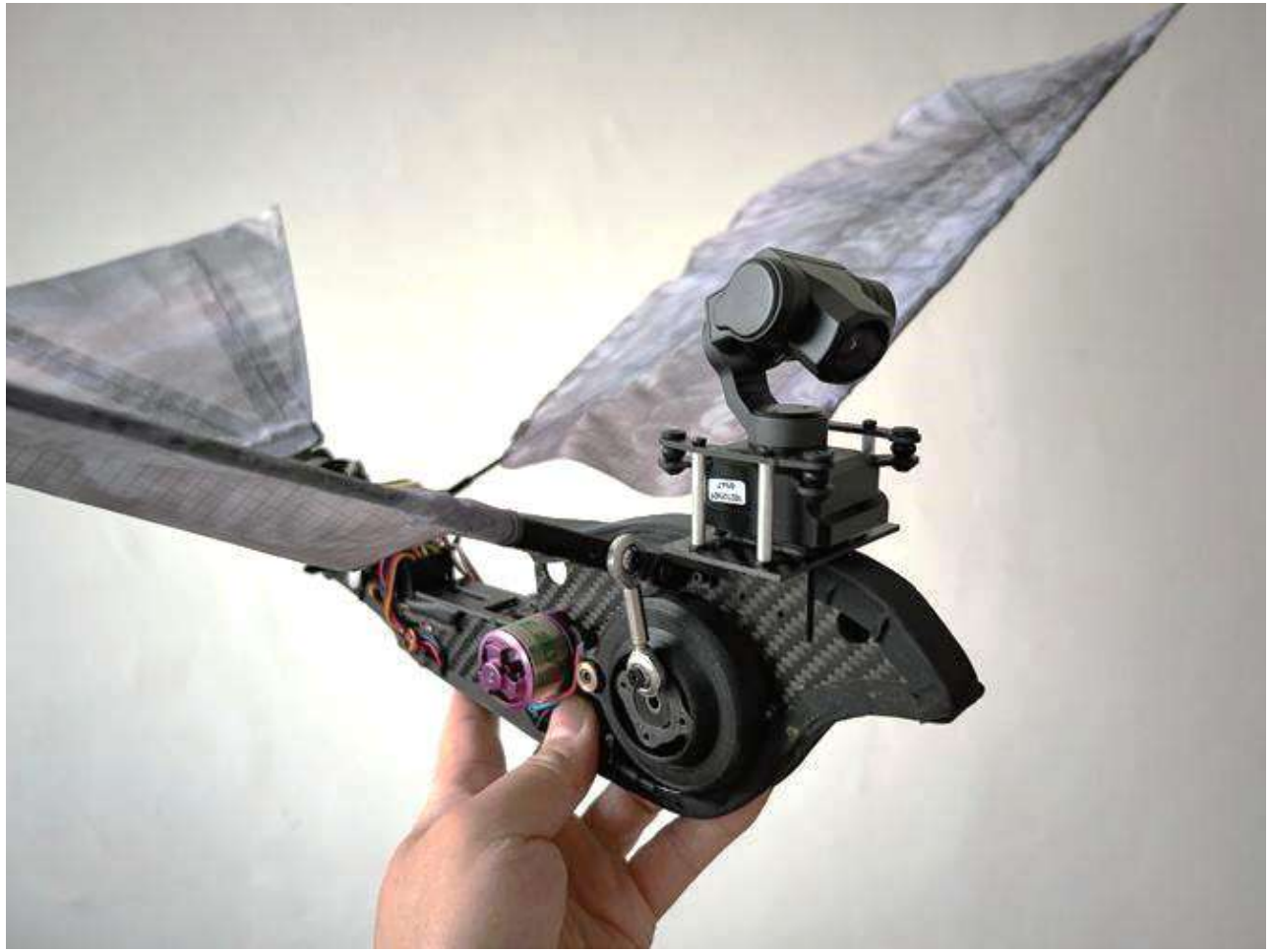
SMART DRONE SERIES

ROBOHAWK 007 RECONNAISSANCE DRONE



Equipment configuration：

1.Night vision camera

2.Special frequency image transmission

3.Receiver

4.Remote controller ELRS receiver

5. Autonomous flight with GNSS flight control set

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systems security

SMART DRONE SERIES

ROBOHAWK 007 RECONNAISSANCE DRONE

Wingspan	1.2m
Length	0. 55m
Take off weight	550g
Body material	The body adopts 3K full carbon fiber frame and stainless steel joints for collision resistance
Wing and tail materials	Impact-resistant high-strength wings and tail, special flexible wing material.
12g digital servo, 2 metal gears, with aileron adjustment function.	Yes
15g aluminum alloy digital servo 1 piece.	Yes
3-axis balanced flight controller with GNSS.	Yes
2S 20A brushless ESC.	Yes
High efficiency brushless motor.	Yes
Double gear synchronous reducer.	Yes
Battery	2S15C 3000mAh Lithium battery
No center of gravity adjustment required.	Yes
The overall battery life is 12-15 minutes.	12-15min

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SMART DRONE SERIES

SUPER VIPER JET UAV ANTI-UAV SYSTEM

The Super Viper drone uses a jet engine and can reach a speed of more than 300km per hour. It can fly for 25 minutes. It is equipped with a radar and uses radio guidance in the front stage and infrared or TV guidance in the rear stage

.It is specially used to strike large cruise missiles such as Shaheed 136 in the air. It is a cheap air defense solution. It uses catapult takeoff and quick response. If the mission cannot be completed, it can land at the airport using the retractable landing gear. It can be used repeatedly to save costs.

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SMART DRONE SERIES

SUPER VIPER JET UAV ANTI-UAV SYSTEM

Length	3253mm
Wingspan	2790mm
Turbojet engine thrust	18-26KG
Center of gravity	280mm from the leading edge of the wing to the wing
Endurance	25min
Speed	300KM/h
MTOW	45KG(with 15L fuel)
Take off method	Catapult/undercarriage
Datalink	30KM
RTK antenna	Yes
Route Planning	Yes

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systems security

SMART DRONE SERIES

C47 TILT-ROTOR FIXED-WING ANTI-DRONE SYSTEM

Material	Carbon fiber,Glass fiber, Kevlar,PVC
Undercarriage positions:	Below the rotor arm
Task room position	Directly below the center of gravity
Structure weight	About 3450g(including structure and installment)
Endurance	3.67H(220min)@1kg load (Measured near sea level with calm winds.)
Max control distance	Manual Remote control /about 0.5km-1km,Ground station/5km-30km
Standard navigation speed	20m/s@12.5kg(Recommended speed in mountainous areas.21m/s@12.5kg)
Max endurance speed	93.6km/h(26m/s)
Standard battery	22.8v/25Ah*2(45.6V)
Max speed	122km/h(about 34m/s)
Stall speed	15.5m/s@12.5kg(16m/s@roll 25°/pitch 15°)
Minimum turning radius	120m@19m/s(roll 18°)(The safe turning radius on the plateau should not be less than 200m)
Maximum level flight altitude	Altitude 4800m

Max take off weight	13.5kg
Max payload	3kg(standard: 1.2kg)
Wing area	About 52dm 2

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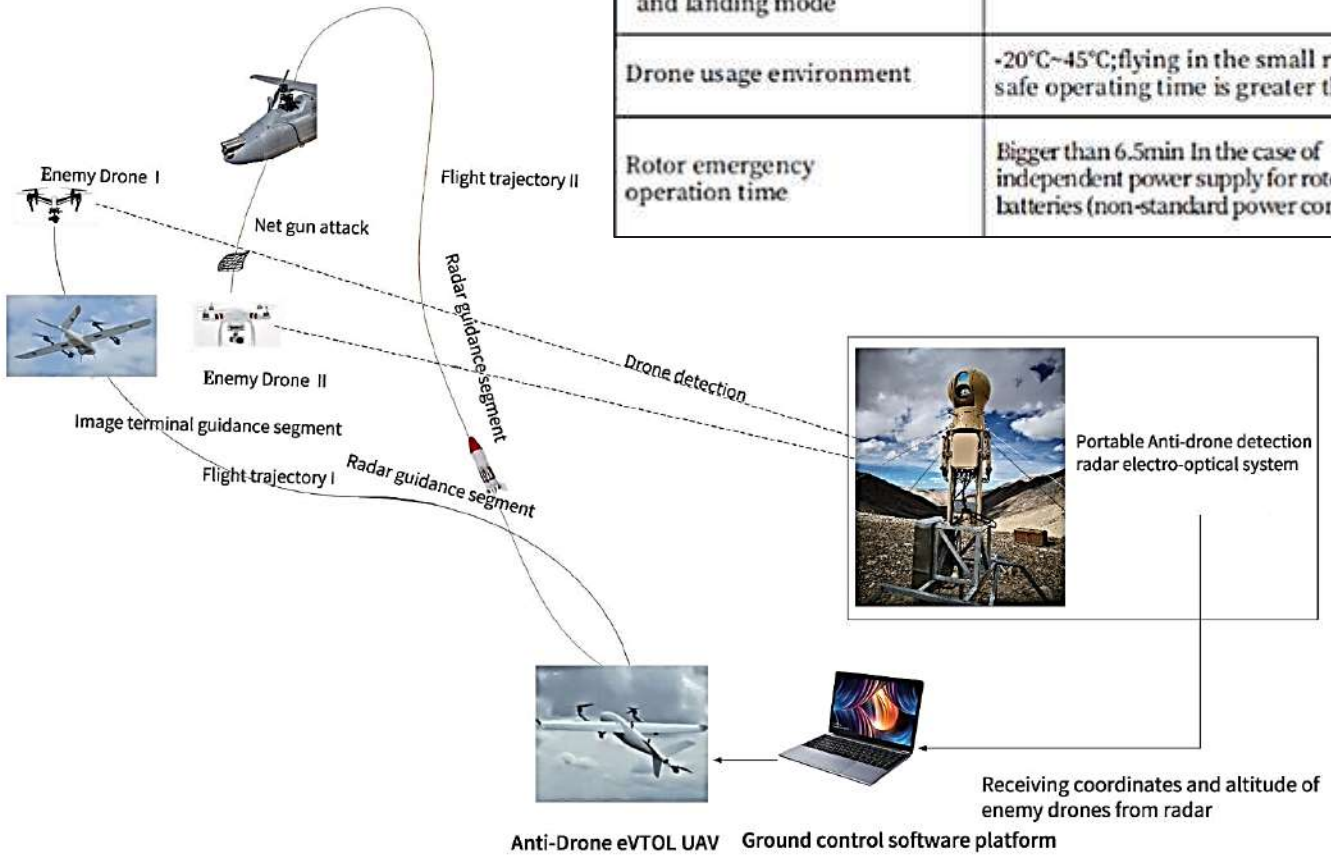
SMART DRONE SERIES

C47 TILT-ROTOR FIXED-WING ANTI-DRONE SYSTEM

Maximum wind resistance capability of rotorcraft takeoff and landing mode	Not less than level 4 wind (gusts of level 6)
Drone usage environment	-20°C~45°C;flying in the small rain(The safe operating time is greater than 10min)
Rotor emergency operation time	Bigger than 6.5min In the case of independent power supply for rotor batteries (non-standard power configuration)



The size of the suspended propeller blades	16/17 Inch
Fixed-wing tail propeller blades	15 to 18 inches
Fixed-wing maximum thrust-to-weight ratio	0.6(standard)
Plateau performance	Yes
Standard payload weight	About 11.5kg
Safe voltage during descent approach	Bigger than 44V(Ge's high-pressure battery)
Wing installation angle	2°
Number of airspeed tube installations	2(standard: Open hole for single pitot tube)
Is the system capable of hot-swapping the power battery pack?	22.8v/25Ah*2(45.6V)
Max speed	Yes
Ground control	Flight control systems that support composite wing control can be used for this type of drone system.
"Solid-state" battery endurance time	4.35H(261min)@ no load (Measured near sea level with calm winds.)

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SMART DRONE SERIES

PANDA 220 JET-PROPELLED WEATHER DRONE

Item	Parameter
Wingspan	2500mm/98.4inch
Wing area	3.93m3
Length	3600mm/141.7inch
MTOW	220kg
Payload	50kg
Maximum load diameter	350mm
Engine	Jet engine
Engine weight	10kg

Flight speed	300-400km/h
Fuel weight	120-160kg(No. 3 aviation fuel)
Endurance	3.5-4.5h
Effective range	1500-1650km
Flight control system	About 1 kg
Avionics system	About 10kg
Body weight	About 30kg
Take off mode	rocket booster
Landing method	Parachute (to be customized)
Operating temperature	0~50℃
Storage temperature	-10℃~+70℃
Body material	Premium composite material
Package of drone body	2.7x1.7x0.5m3
Packing of drone head	1.8x1.8x0.5m3

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systems security

Product category

FPV SERIES

DESERT SENTINEL
systems security

FPV SERIES

HS-X07

The HS-X07 is a high-performance tactical drone designed for long-range reconnaissance, rapid deployment, and precision payload delivery. With its lightweight frame, powerful propulsion system, and high-definition camera, it excels in demanding aerial missions across various terrain and operational conditions.

KEY SPECIFICATIONS:
— Rated Load: 2.2 kg
— Maximum Payload Capacity: 3.2 kg
— Take-off Weight: 4.4 kg
— Max Flight Distance: 10+ km
— Max Flight Speed: 150 km/h
— Ascent Speed: 12 m/s

CAMERA:
— CMOS Sensor 1/3”, 1200TVL
— 2.1 mm F2.4 Lens, 165° FOV
— Aspect Ratio: 16:9

DESERT SENTINEL
systems security

FPV SERIES

HS-X10

The HS-X10 is a powerful tactical UAV designed for long-range reconnaissance and heavy payload missions. Built for durability and performance, it features extended range, high-speed flight, and superior ascent capabilities. Ideal for security, military, and industrial operations.

KEY SPECIFICATIONS:
— Rated Load: 3.5 kg
— Maximum Payload Capacity: 4.8 kg
— Take-off Weight: 6.3 kg
— Max Flight Distance: 10+ km
— Max Flight Speed: 175 km/h
— Ascent Speed: 15 m/s

CAMERA:
— CMOS Sensor 1/3”, 1200TVL
— 2.1 mm F2.4 Lens, 165° FOV
— Aspect Ratio: 16:9

DESERT SENTINEL
systems security

FPV SERIES

HS-P104

The HS-P104 is a professional heavy-duty UAV built for high-load operations with excellent flight control and transmission capabilities. Designed for industrial, tactical, and surveillance applications, it supports long-distance control and advanced imaging sensors. This platform combines speed, stability, and payload versatility in a robust frame.

KEY SPECIFICATIONS:
— Rated Load: 3.6 kg
— Maximum Payload Capacity: 4.8 kg
— Take-off Weight: 6.8 kg
— Max Flight Distance: 10+ km
— Max Flight Speed: 120 km/h
— Ascent Speed: 15 m/s

CAMERA:
— CMOS Sensor 1/3”, 1200TVL
— 2.1 mm F2.4 Lens, 165° FOV
— Aspect Ratio: 16:9

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FPV SERIES

HS-P106

The HS-P106 is a heavy-lift UAV platform designed for high-performance missions in demanding environments. With a large payload capacity, extended range, and high-speed capabilities, it is suitable for reconnaissance, transport, and special operations requiring reliable and powerful aerial performance.

KEY SPECIFICATIONS:
— Rated Load: 4.5 kg
— Maximum Payload Capacity: 6.5 kg
— Take-off Weight: 9.5 kg
— Max Flight Distance: 10+ km
— Max Flight Speed: 175 km/h
— Ascent Speed: 15 m/s

CAMERA:
— CMOS Sensor 1/3”, 1200TVL
— 2.1 mm F2.4 Lens, 165° FOV
— Aspect Ratio: 16:9

DESERT SENTINEL
systems security

FPV SERIES

HS-P134

The HS-P134 is a robust multi-rotor UAV designed for tactical and high-load missions. Its optimized aerodynamic design and powerful propulsion system allow for extended range, stable performance, and efficient operations in diverse conditions. Ideal for inspection, surveillance, and specialized deployments.

KEY SPECIFICATIONS:
— Rated Load: 5.5 kg
— Maximum Payload Capacity: 6 kg
— Take-off Weight: 10 kg
— Max Flight Distance: 10+ km
— Max Flight Speed: 100 km/h
— Ascent Speed: 10 m/s

CAMERA:
— CMOS Sensor 1/3”, 1200TVL
— 2.1 mm F2.4 Lens, 165° FOV
— Aspect Ratio: 16:9

DESERT SENTINEL
systems security

FPV SERIES

HS-P136

The HS-P136 is a high-performance industrial drone designed for large payload capacity and extended flight endurance. Its robust carbon-fiber frame and precise flight control system make it ideal for demanding field operations such as logistics, surveillance, and inspection. The platform offers versatile configuration options and stable long-range signal transmission.

KEY SPECIFICATIONS:
— Rated Load: 9 kg
— Maximum Payload Capacity: 10 kg
— Take-off Weight: 15 kg
— Max Flight Distance: 10+ km
— Max Flight Speed: 90 km/h
— Ascent Speed: 10 m/s

CAMERA:
— CMOS Sensor 1/3”, 1200TVL
— 2.1 mm F2.4 Lens, 165° FOV
— Aspect Ratio: 16:9

DESERT SENTINEL
systems security

FPV SERIES

LS-1 / LS2

It has the functions of HD image retrieval, flight path planning, flight mode adjustment, flight status acquisition, drone payload control, etc; In order to improve the service performance under harsh environment, the industrial IP rating level is up to IP54; The remote control design has built-in modules such as long-distance communication radio, HD image receiver, large independent display screen, high-performance industrial computer motherboard, etc.

LS2 integrates a brand-new video transmission system, so that the video transmission distance can reach 20 kilometers, and supports dual control functions, which can realize separate control of the aircraft and the mount. The product has built-in GPS built-in 4G module, wired and wireless projection screen and other special functions.

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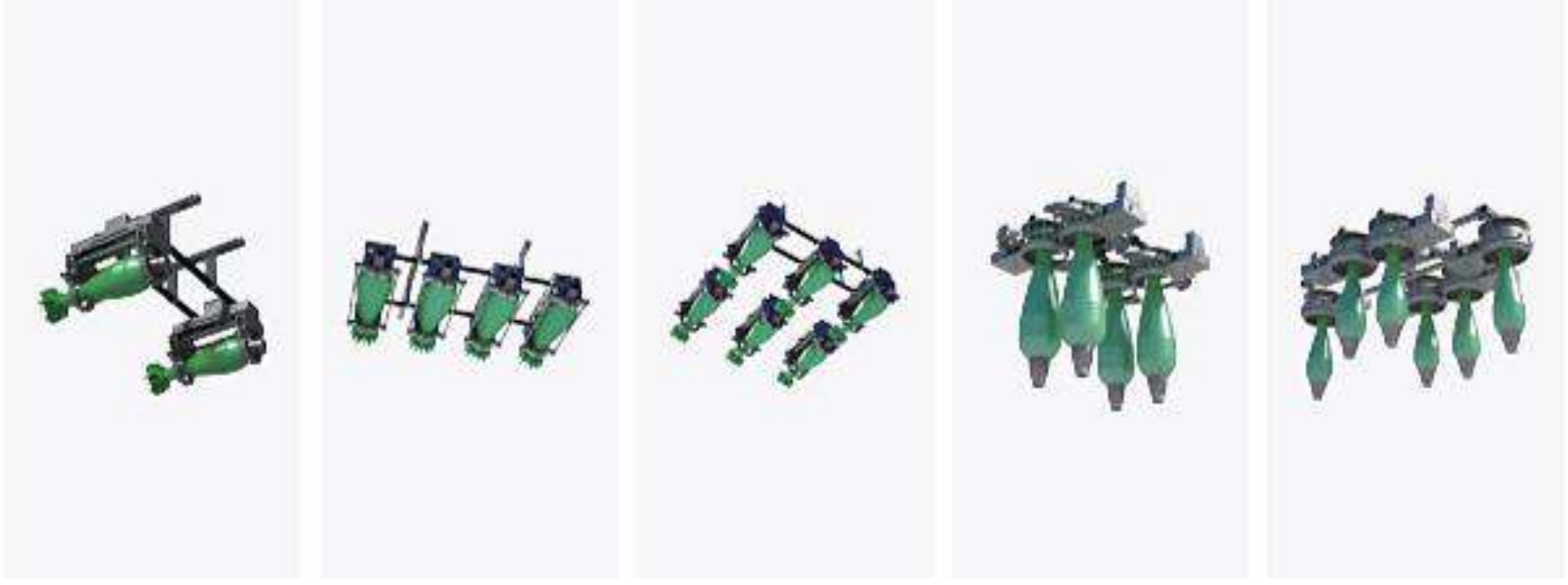
FPV SERIES

BOMB RELEASE GEAR / WYVERN

Wyvern bomb release gear is a bomb dropping device designed for mortars, using a reliable and stable caliper fixed structure, which can be loaded with one button, with a safety pin, which can trigger the bomb drop through the lever device of the remote ground station, or the automatic delivery of the route.



DESERT SENTINEL
systems security

FPV SERIES

DATALINK / MD80/AD80

MD80 drone data link has a transmission distance of up to 80km, and can effectively avoid interference from any counter-drone system and improve flight safety."

AD80 drone data link has a transmission distance of up to 80km, and can effectively improve the stability of data transmission with the use of its tracking antenna as well as effectively avoid interference from any counter-drone system and improve flight safety.

DESERT
SENTINEL
systems security

Product category

PERIMETER SECURITY SYSTEM

DESERT SENTINEL
systems security

PERIMETER SECURITY SYSTEM

INTELLIGENT MULTI SENSOR FUSION PERIMETER SECURITY SYSTEM

Intelligent multi sensor fusion perimeter security system SP150VF, mainly consists of intelligent MMW detecting radar, long range IR camera and 3D vision blind area coverage module in an integrated structure.

This system is working based on the MMW detecting radar's continuously scanning of the protection area, integrating with edge AI deep learning algorithm, realized real time alarm and video tracking of the moving intrusion target in the protection area.

It is able to intelligently recognize different intrusion target like human and vehicle, filtering out false alarm like animal, trees, rain etc, and supporting unattended operation of perimeter control.

DESERT SENTINEL
systems security

PERIMETER SECURITY SYSTEM

INTELLIGENT MULTI SENSOR FUSION PERIMETER SECURITY SYSTEM

Product parameters

Detection Distance	0~150m (radial)
Monitoring Area	Horizontal angle: 15°, Pitching angle: 10°, Adjustable defense zone
Video Identification	Moving target like human/vehicle/animal, False alarm like trees, rain
Infrared Supplementary Light	≤150m
Alarm	Sound and light integrated alarm, support custom voice

DESERT SENTINEL
systems security

Product category

FIXED C-UAV EQUIPMENT

DESERT SENTINEL
systems security

FIXED C-UAV EQUIPMENT

AT-610 EWALL

Description

EWALL, Fixed Counter-UAV Electronic Wall with Shielding Function, can be used to construct targeted drone protection "walls" for the target area through the networking of multiple devices.

The SDR technology and high-gain antenna carried by EWALL prevent the UAV from crossing the target area, achieving a stopping effect.

While effectively protecting, the hollow-design does not affect daily communication inside and outside the controlled area, solving the problem of interference signals disturbing the public.

The equipment is suitable for the protection of military field combat camps and command posts, as well as the deployment and control of strategic points such as prisons, anchorages, etc.

DESERT SENTINEL
systems security

FIXED C-UAV EQUIPMENT

AT-607 AT-607 FIXED COUNTER-UAV EQUIPMENT

Description

Fixed Counter-UAV Equipment, relying on advanced SDR technology, can quickly and accurately block UAVs' navigation, remote control and data transmission signal channels, preventing UAVs' intrusion.

The equipment can interfere with various types of UAVs, and has good effect against FPV drones and UAVs with high anti-interference capability

DESERT SENTINEL
systems security

FIXED C-UAV EQUIPMENT

AT-611 FIXED NAVIGATION DECOY EQUIPMENT

Description

Fixed Navigation Decoy Equipment, based on SDR architecture, can generate virtual navigation signals, and invade the navigation system of illegal UAV targets, making them unable to fly according to the predetermined trajectory, so as to achieve the purpose of driving away the illegal UAVs.

DESERT SENTINEL
systems security

FIXED C-UAV EQUIPMENT

AT-606 FIXED ELECTRO-OPTICAL UAV TRACKING EQUIPMENT

Description

Fixed UAV Detection Equipment, using advanced passive detection technology, can carry out 360° omni-directional detection,identification and direction-finding on various types of UAVs with a long distance.

Based on SDR architecture and spectrum Al recognition technology, the detection freguency can be customized.

The equipment provides multiple intertaces which enable interaction with various equipment.

It's equipped with the functions of single-station positioning, accurate identification and trajectory playback.

FIXED C-UAV EQUIPMENT

AT-612 FIXED UAV RADAR EQUIPMENT

Description

Fixed UAV Radar Equipment is a pulse Doppler system three-dimensional radar.

It detects low-altitude and ground targets through “continuous rotation in azimuth direction and phased scanning in pitching direction”.

It can be equipped with electro-optical systems and cascaded with countermeasures such as RF jammer, laser weapons, navigation decoy, etc. to achieve precise strikes.

DESERT SENTINEL
systems security

FIXED C-UAV EQUIPMENT

AT-610A EWALL

Description

EWALL, Fixed Counter-UAV Electronic Wall with Shielding Function, can be used to construct targeted drone protection “walls” for the target area through the networking of multiple devices.

The SDR technology and high-gain directional antenna carried by EWALL prevent the UAV from crossing the target area, achieving a stopping effect.

While effectively protecting, the hollow-design does not affect daily communication inside and outside the controlled area, solving the problem of interference signals disturbing the public.

DESERT SENTINEL
systems security

FIXED C-UAV EQUIPMENT

AT-616 HANDHELD UAV DETECTOR

The AT-616 is a rugged, handheld UAV detection device designed for tactical use in individual soldier operations.

It utilizes passive SDR-based detection technology to provide 360° real-time identification, tracking, and alerting for both DIY FPV and conventional drones.Operating within a wide frequency range of 100 MHz to 6000 MHz, it supports the detection of DJI, Autel, WiFi-based, and custom FPV drones.

With a high-precision phase-comparison omnidirectional antenna, the device enables automatic direction-finding without rotation, accurately determining drone bearing and signal source.The system features a 6-inch touch LCD screen, modular helmet-mount and handheld configurations, and integrated battery that allows simultaneous charging and operation. Built to IP65 standards, it ensures stable performance in demanding environments.

DESERT SENTINEL systems security

Product category

PORTABLE C-UAV EQUIPMENT

DESERT SENTINEL
systems security

PORTABLE C-UAV EQUIPMENT

AT-623 FPV KILLER

Description

Based on SDR signal jamming technology, FPV Killer effectively blocks the remote control signal of FPV drones, preventing single soldiers from being attacked by FPVs.

The product is small in size and lightweight, and is flexible and portable.

Easy to operate, one soldier can quickly respond to counter suicide FPV attacks.

DESERT SENTINEL
systems security

PORTABLE C-UAV EQUIPMENT

AT-605 PORTABLE COUNTER-UAV EQUIPMENT

Description

Detection and countermeasure all-in-one design, without any extra parts, flexible and convenient for individual carrying.

Support 3km omni-directional detection and 2km directional interference for all types of common UAV in surrounding airspace.

Equipped with SDR technology and visual auxiliary aiming system, it can detect, locate and identify UAV at 360°, and make comprehensive suppression, force the UAV to hover, return or descend

PORTABLE C-UAV EQUIPMENT

AT-619 PORTABLE COUNTER-FPV SHIELD

Description

Based on SDR jamming technology. Portable Counter-FPV Shield supports different frequency-band configurations and can effectively block UAV signals such as data/image transmission, remote control, navigation, etc., especially for various FPV drones with good countermeasures.

Overall flexible and portable, it adopts an IP54 level ultra durable shell, which is heat-resistant and corrosion-resistant.

It can be quickly deployed in various scenarios such as counter-terrorism, important activities security protection, and base protection. Its appearance is concealed and not easy to cause panic.

DESERT SENTINEL
systems security

PORTABLE C-UAV EQUIPMENT

AT-620 HANDHELD COUNTER-UAV EQUIPMENT

Description

Handheld Counter-UAV Equipment supports multi-frequency interference.

Equipped with high-gain wide-band antenna, by emitting high-power directional electromagnetic waves, it can cut off UAV data/image transmission, remote control, navigation signals, forcing the UAV to hover, return or land, ensuring airspace safety within a 2.5km area.

Compact design, easy to carry and simple to operate, ready to use, suitable for various emergency UAV control.

DESERT SENTINEL
systems security

PORTABLE C-UAV EQUIPMENT

AT-618 BACKPACK-TYPE COUNTER

Description

Backpack-type Counter-UAV Equipment, equipped with SDR technology, supports multi-band interference and can effectively drive away or force-land UAVs with a radius of 1.5km.

It is especially effective against various types of FPV drones.

The backpack design is easy to carry, and can mounted onto a vehicle to provide effective protection when the vehicle is driving or parking to prevent UAV attacks.

PORTABLE C-UAV EQUIPMENT

AT-621 PORTABLE FPV DETECTION TERMINAL

Description

Portable FPV Detection Terminal with built-in antennas, easy to operate and portable.

It can quickly scan various FPV video image signals and capture their real-time images for display.

The device supports simultaneous display of 4-channel FPV video images and continuous signal scanning in each frequency band.

DESERT SENTINEL
systems security

PORTABLE C-UAV EQUIPMENT

AT-626 UAV DETECTION AND WARNING EQUIPMENT

The AT-626 is an AoA-based UAV detection and positioning system designed for early warning and direction-finding against a wide range of drone threats, including DIY FPV drones and commercial UAVs.With only two networked units, it provides 360° omnidirectional monitoring and 2 km radius positioning in urban environments, and up to 5 km in open terrain.

Operating across 100 MHz – 6000 MHz, it supports multiple frequency bands including 1.2 GHz, 1.4 GHz, 2.4 GHz, and 5.8 GHz.Its compact, pole-mounted design with PoE/DC power supply and RJ-45 communication ensures easy deployment in both temporary and fixed-site scenarios.

Rated IP65, it withstands harsh weather conditions from -30°C to +55°C.Ideal for border control, forward base defense, and mobile deployments requiring high-precision detection and cost-efficient setup.

DESERT SENTINEL
systems security

PORTABLE C-UAV EQUIPMENT

AT-690 VEHICLE-MOUNTED COUNTER-UAV SYSTEM

Description

Vehicle-mounted Counter-UAV System, highly integrated detection, identification, countermeasure and navigation decoy functions.

Supports rapid deployment on various vehicles without modification.

Moves quickly to arrive at the defense site without field limitation.

Supports dynamic defense during movement.

Due to SDR technology, with low power and good interference effect.

Supports algorithm upgrading by software to protect hardware investment and user’s benefit.

DESERT SENTINEL
systems security

PORTABLE C-UAV EQUIPMENT

AT-619A PORTABLE COUNTER FPV DEVICE

Description

Portable Counter-UAV Shield, based on SDR technology, supports multi-band configuration, and can effectively interfere with UAVs over a distance of 2.5km, especially for various types of FPV drones.

The equipment can be quickly deployed in various scenarios.

Its appearance is concealed and not easy to cause panic.

DESERT SENTINEL
systems security

Product category

VEHICLE MOUNTED C-UAV EQUIPMENT

DESERT SENTINEL
systems security

VEHICLE MOUNTED C-UAV EQUIPMENT

AT-625 VEHICLE-MOUNTED COUNTER-UAV/FPV EQUIPMENT

Description

Based on SDR jamming technology, the equipment can effectively block the remote control, image transmission, and navigation signals of FPV drones and conventional UAVs, building a safety defense line for key armored equipment.

The equipment adopts a unit module design, including counter-FPV units, counter-UAV units and a control unit, which can achieve one key switch.

Military-level design that can meet various combat scenarios, defend against FPV attacks on armored equipment, and protect the safety of important assets.

DESERT SENTINEL
systems security

Product category

C-UAV CONTROL PLATFORM

DESERT SENTINEL
systems security

C-UAV CONTROL PLATFORM

AT-608 COUNTER-UAV CONTROL PLATFORM

Description

Counter-UAV Control Platform, has highly integrated and intelligent management capabilities and can effectively link various UAV detection, countermeasures and decoy equipment. Through unified network to carry out accurate detection, real-time tracking and efficient strikes to UAV, achieving comprehensive, dynamic monitoring and full-featured command and control of regional low-altitude safety. Automate and visualize the entire management and control process.

The platform adopts a B/S structure design and can load high-definition GIS maps. It has functions such as intrusion alarm, precise positioning, and trajectory display, providing comprehensive and accurate information to assist decision-making, achieving rapid disposal and precise control.

DESERT SENTINEL
systems security

Product category

SDR C-UAV DIGITAL & DETECTION MODULE

DESERT SENTINEL
systems security

SDR C-UAV DIGITAL & DETECTION MODULE

M1001 SDR COUNTER-UAV DIGITAL MODULE

Description

The SDR Counter-UAV Digital Source Module is built on Software Defined Radio (SDR) architecture. It comprises two key components: a digital source and a power amplifier unit. The digital source operates within a wide frequency range of 20MHz to 6000MHz and offers flexible configuration within a 200MHz bandwidth, ensuring precise frequency characteristics. Designed for superior performance, it automatically generates digital modulation interference codes tailored to various drone types and supports common protocols such as ELRS, Crossfire, Flysky, Ocusync, Lightbridge, and Skyloas. Its integrated modular design is compact and small, featuring flexible interfaces that allow for seamless integration into diverse systems.

DESERT SENTINEL
systems security

SDR C-UAV DIGITAL & DETECTION MODULE

M2001 SDR UAV DIGITAL MODULE

Description

The M1002 Broadband SDR Counter-UAV Digital Module is engineered specifically to suppress DIY FPV drones. Built on SDR architecture, it integrates a digital source and a broadband power amplifier to deliver targeted jamming of mainstream FPV protocols such as ELRS and TBS Crossfire.The FPGA-controlled digital source emits versatile digitally modulated interference signals across the 300 MHz to 1200 MHz spectrum. These are amplified by a broadband PA, ensuring effective suppression even against fast, low-cost, and hard-to-jam FPV drones.The module's compact, modular design with standard interfaces enables seamless integration into a variety of counter-drone systems, offering a professional-grade solution for neutralizing DIY FPV threats.

DESERT SENTINEL
systems security

SDR C-UAV DIGITAL & DETECTION MODULE

M2001 SDR UAV DETECTION MODULE

The M2001 is a high-performance passive detection module built on SDR architecture, tailored for identifying and tracking drone signals.

It supports ultra-wideband scanning from 100 MHz to 6000 MHz, enabling accurate detection of consumer drones (DJI/Autel), DIY FPV drones, and WiFi-based UAVs.The module supports DJI protocol decryption and standard RID analysis, offering multi-model recognition and robust signal intelligence.

With a compact form factor and standardized interfaces, it seamlessly integrates with counter-UAV jamming systems to provide full-spectrum threat awareness and early warning capability.Its scalable and modular design ensures reliable operation across portable, fixed, and mobile configurations, while firmware upgradability allows persistent performance without hardware changes.

DESERT SENTINEL
systems security

SDR C-UAV DIGITAL MODULE

DIRECTIONAL ANTI-DRONE ANTENNA

Description

The Antenna is only used for our SDR module testing, users need to design their own antenna integrated according to their own product design.

The frequency range of the antenna output should be the same as the frequency range of the module, and the non-correspondence of the frequency will lead to the damage of the module.

DESERT SENTINEL
systems security

Product category

RADARS

DESERT SENTINEL
systems security

RADARS

YFR-01 RADAR

Description

YFR-01 radar is a pulsed Doppler system three-coordinate radar with azimuth machine scanning and pitch frequency scanning, which is mainly used to detect and locate low-altitude aircraft.

Technical specifications		YFR-01B	YFR-01C
Radar band		Ku	Ku
Technology system		Linear frequency modulated pulses	
Scanning method		Azimuth machine scanning + pitch frequency scanning	
Detection distance	Typical target: DJI Phantom 4	≥3km	≥3km
Pitch coverage		0°~40°	0°~40°
Detection accuracy	Distance	≤10m	≤10m
	Azimuth	≤0.6°	≤0.6°
	Pitch	≤0.6°	≤0.6°
Data rate		6s	6s
Target capacity		≥500 block	≥500 block
Weight		≤27kg	≤27kg
Size		≤610×270×440 (mm)	≤610×270×440 (mm)
Power consumption		≤120W	≤160W

DESERT SENTINEL
systems security

RADARS

YFR-02 RADAR

Description

YFR-02 radar is a pulsed Doppler system three-coordinate radar with azimuth machine scanning and pitch phase scanning, which is mainly used to detect and locate low-altitude aircraft.

Technical specifications		YFR-02A	YFR-02B	YFR-02C	YFR-02C-ku	YFR-02D
Radar band		X	X	X	ku	x
Technology system		Linear frequency modulated pulses				
Scanning method		Azimuth machine scanning + pitch phase scanning				
Detection distance	Typical target: DJI Phantom 4	≥4km	≥5km	≥8km	≥6km	≥10km
Cover range	pitch	0°~30°	0°~40°	0°~30°	0°~360°	0°~360°
	azimuth	0°~360°	0°~360°	0°~360°	0°~30°	0°~30°
Detection accuracy	Distance	≤8m	≤8m	≤8m	≤8m	≤8m
	Azimuth	≤0.8°	≤0.6°	≤0.5°	≤0.5°	≤0.4°
	Pitch	≤1°	≤0.6°	≤0.5°	≤0.5°	≤0.3°
Data rate		6s	6s	3s	3s	3s
Target capacity		≥500 block	≥500 block	≥500 block	≥500 block	≥500 block
Weight		≤26kg	≤30kg	≤75kg	≤85kg	≤100kg
Size		≤800×270×370 (mm)	≤850×330×440 (mm)	≤980×450×660 (mm)	≤750×400×780 (mm)	≤900×450×960 (mm)
Power consumption		<160W	<220W	<400W	<980W	<1200W

RADARS

YFR-03 RADAR

Description

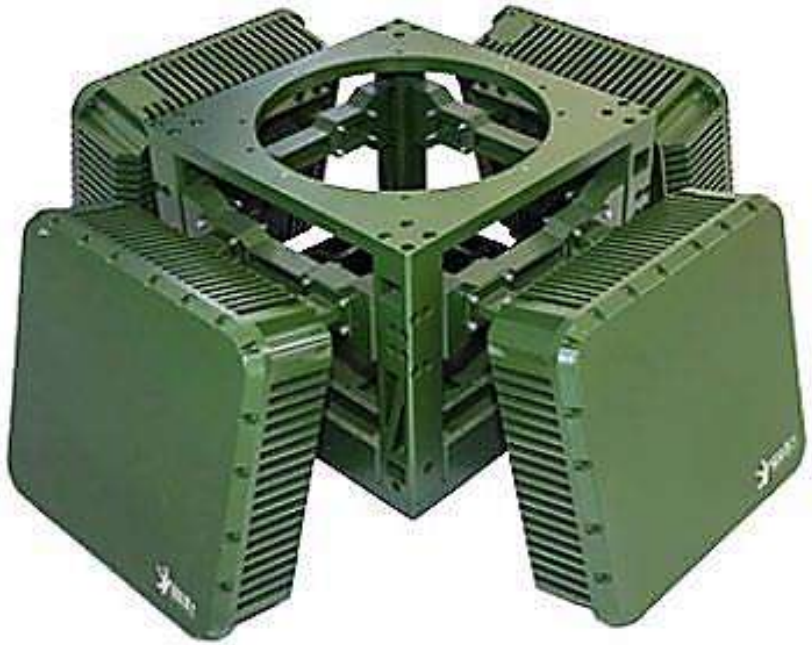
YFR-03 radar is a pulsed Doppler system three-coordinate radar with azimuth machine scanning and pitch DBF scanning, which can detect and locate low-altitude aircraft.

Technical specifications		YFR-03B	YFR-03B-KU	YFR-03D	YFR-03E	YFR-03F
Radar band		X	Ku	ku	X	KU
Technology system		DBF	DBF	DBF	DBF	DBF
Scanning method		Azimuth machine scanning + pitch phase scanning				
Detection distance	Typical target: DJI Phantom 4	≥5km	5km	≥10km	≥12km	≥15km
Coverage	Azimuth	0°~360°	0°~360°	0°~360°	0°~360°	0°~360°
	Pitch	0°~30°	0°~30°	0°~30°	0°~30°	0°~30°
Detection accuracy	Distance	≤8m	≤8m	≤8m	≤8m	≤8m
	Azimuth	≤0.5°	≤0.5°	≤0.3°	≤0.3°	≤0.25°
	Pitch	≤0.5°	≤0.5°	≤0.3°	≤0.3°	≤0.25°
Data rate		2s	2s	2s	2s	2s
Target capacity		≥500 block	≥500 block	≥500 block	≥500 block	≥500 block
Weight		≤80kg	≤80kg	≤95kg	≤100kg	≤100kg
Size		≤1000×850×340 (mm)	≤800×810×330 (mm)	≤760×450×870 (mm)	≤1050×430×950 (mm)	≤1140×400×900 (mm)
Power consumption		≤600W	≤600W	≤1000W	≤1000W	≤1000W

DESERT SENTINEL
systems security

RADARS

YFR-04 RADAR



Description

YFR-04 is a pulsed Doppler system three-coordinate radar with two-dimensional phase scanning system, which is mainly used for complex urban environment detection and individual battlefield surveillance.

Technical specifications		YFR-04A	YFR-04B	YFR-04C	YFR-04C-KU	YFR-04D
Radar band		Ka	X	X	Ku	x
Technology system		Linear frequency modulated pulses				
Scanning method		Azimuth machine scanning + pitch phase scanning				
Detection distance	Typical target: DJI Phantom 4	≥2km	≥3km	≥6km	≥5km	≥8km
Coverage	Azimuth	±45°	±45°	±45°	±45°	±45°
	Pitch	0°～30°	0°～50°	0°～50°	0°～50°	0°～30°
Detection accuracy	Distance	≤8m	≤8m	≤8m	≤8m	≤8m
	Azimuth	≤0.5°	≤0.5°	≤0.4°	≤0.3°	≤0.3°
	Pitch	≤1.0°	≤0.5°	≤0.4°	≤0.3°	≤0.3°
Data rate		0.5s	0.5s	0.5s	0.5s	0.5s
Target capacity		≥500 block	≥500 block	≥500 block	≥500 block	≥500 block
Weight		≤15kg	≤12kg	≤25kg	≤22kg	≤1500kg
Size		≤450×350×135 (mm)	≤350×350×155 (mm)	≤458×350×150 (mm)	≤350×350×150 (mm)	≤770×580×350 (mm)
Power consumption		≤500W	≤400W	≤600W	≤600W	≤1500W
					Fixed, vehicle-mounted,	Fixed, vehicle-

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systems security

RADARS

YFR-05 RADAR

Description

As a type of two-dimensional electric scanning radar, YFR-05 can detect and locate targets such as subsonic, supersonic drones or projectiles.

Technical specifications		YFR-05D
	Radar band	Ku
	Technology system	Linear frequency modulated pulses
	Scanning method	Azimuth phase scanning+ pitch frequency scanning
Detection distance	Typical target (RCS=0.01m2)	≥3km
	Target speed	10~940m/s
	Pitch coverage	≥0~10°
	Azimuth coverage	±45°
Detection accuracy	Distance	≤8m
	Azimuth	≤0.3°
	Pitch	≤0.3°
	TAS target capacity	≥5 block
	Data rate	0.2S
	Weight	≤1000kg
	Size	≤1140×370×900 (mm)

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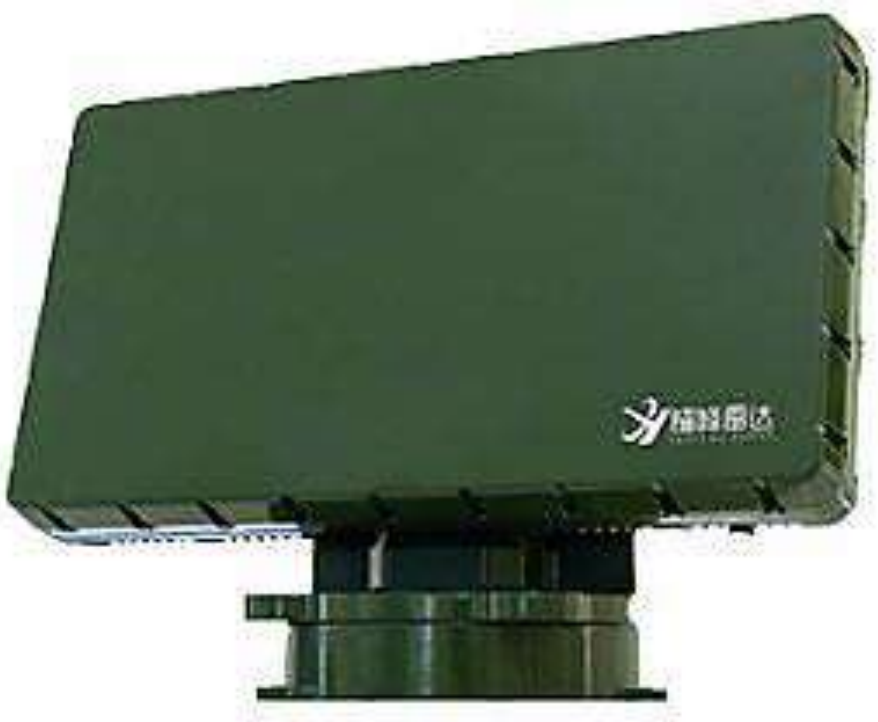
systems security

RADARS

YFR-06 RADAR



Description

YFR-06 radar can detect and locate ground vehicles and people , which is mainly used for border and coastline security protection.

Technical specifications		YFR-06A
Radar band		Ku
Technology system		Linear frequency modulated pulses
Scanning method		Azimuth machine/frequency scanning
Detection distance (electric scanning mode)	Human	≥5km
	Vehicle	≥10km
Coverage	Electric scanning	±45°
	Machine scanning	0°~360°
Detection accuracy	Distance	≤8m
	Azimuth	≤0.4°
Data rate		10S
Target capacity		≥500 block
Weight		≤30kg
Size		≤700×290×450（mm）

DESERT SENTINEL
systems security

RADARS

YFR-011 RADAR

Description

YFR-11 radar is a pulsed Doppler system three-coordinate radar with azimuth machine scanning and pitch phase scanning, which is mainly used for low-altitude aircraft, ground moving vehicles and people detection and positioning.

Technical specifications			YFR-11B	YFR-11-C
Radar band			X	X
Technology system			Linear frequency modulated pulses	
Scanning method			Azimuth machine scanning + pitch phase scanning	
Detection distance	Air-ground surveillance mode	Typical target: DJI Phantom 4	≥5km	≥8km
		Human	≥7km	≥10km
		Vehicle	≥15km	≥20km
Pitch coverage			0°~30°	0°~30°
Detection accuracy	Distance		≤8m	≤8m
	Azimuth		≤0.6°	≤0.5°
	Pitch		≤0.6°	≤0.5°
Data rate			6s	6s
Target capacity			≥500 block	≥500 block
Weight			≤30kg	≤66kg
Size			≤850×330×440 (mm)	≤980×450×650 (mm)
Power consumption			≤220W	≤400W

DESERT SENTINEL
systems security

RADARS

YFR-012 RADAR

Description

YFR-12 is a pulsed Doppler system three-coordinate radar with azimuth machine scanning and pitch phase scanning, which can detect and locate drones and surface vessels at the same time, mainly for the safety protection of the coastline.

Technical specifications		YFR-12B
Radar band		X
Technology system		Linear frequency modulated pulses
Scanning method		Azimuth machine scanning + pitch phase scanning
Detectiondistance	Typical target: DJI Phantom 4	≥5km
	RCS=2m²	≥15km
	RCS=10m²	≥23km
	RCS=100m²	≥40km
Coverage	Azimuth	0°~360°
Detection accuracy	Distance	≤8m
	Azimuth	≤0.3°
Data rate		3s
Target capacity		≥500 block
Weight		≤70kg
Size		≤1800×440×480 (mm)
Power consumption		≤400W

DESERT SENTINEL
systems security

RADARS

YFR-013 RADAR

Description

YFR-13 is a pulsed Doppler system three-coordinate radar with azimuth machine scanning and pitch phase scanning, which can detect and locate low-altitude flying objects (drones and birds), mainly used in the field of airport bird control.

Technical specifications		YFR-11B	YFR-11B	YFR-11-C
Radar band		X	ku	X
Technology system		/	DBF	DBF
Scanning method		Azimuth machine scanning + pitch phase scanning		
Detection distance	Typical target(500g pigeon)	≥5km	≥7km	≥8km
Coverage	Azimuth	0°~360°	0°~360°	0°~360°
	Pitch	0°~30°	0°~30°	0°~30°
Detection accuracy	Distance	≤8m	≤8m	≤8m
	Azimuth	≤0.5°	≤0.3°	≤0.3°
	Pitch	≤0.5°	≤0.3°	≤0.3°
Data rate		3s	2s	2s
Target capacity		≥500 block	≥500 block	≥500 block
Weight		≤66kg	≤70kg	≤100kg
Size		≤980×450×650 (mm)	≤900×400×700 (mm)	≤1000×380×800 (mm)
Power consumption		≤400W	≤1000W	≤1200W

DESERT SENTINEL
systems security

Product category

NONLINER JUNCTION DETECTOR

DESERT SENTINEL
systems security

NONLINER JUNCTION DETECTOR

AT-801

A new domesticated non-linear node detector can detect any electronic devices hidden in walls, floors, ceilings, lamps, furniture or containers, regardless of whether these electronic devices are transmitting signals or not, and whether they are on or not, it can be alerted in various ways, such as through displays, vibration and sound prompts, so that the detectors can focus on the hidden targets.
Can be widely used in government, public security, prisons, justice, commercial security and personal privacy protection, etc.
Corporate trade secret protection: detecting unauthorized electronic devices hidden in important meeting rooms or confidential offices of the company, such as bugs, cell phones and SIM card-containing devices;
Explosive discharge: detecting electronic explosive devices and remote controls in dangerous areas;

DESERT SENTINEL
systems security

NONLINER JUNCTION DETECTOR

AT-802

A compact portable non-linear node detector that detects electronic devices hidden in walls, floors, ceilings, light fixtures, furniture or containers, regardless of whether they are transmitting signals or switched on and off, and can provide alarms through a variety of means such as displays, sound and vibration, so that the detectorists can find the target device, to protect the privacy of the organization and individuals.

Can be widely used in government, public security, prisons, justice, commercial security and personal privacy protection, etc.

Corporate trade secret protection: detecting unauthorized electronic devices hidden in important meeting rooms or confidential offices of the company, such as bugs, cell phones and SIM card-containing devices;

Explosive discharge: detecting electronic explosive devices and remote controls in dangerous areas;

DESERT SENTINEL
systems security

NONLINER JUNCTION DETECTOR

AT-811

A wireless signal detection unit is integrated into the non-linear node detection unit to detect eavesdropping and eavesdropping electronic devices in packages, walls, floors, ceilings, lamps, furniture or containers. For hidden electronic devices, the enhanced non-linear node detector can be alarmed by sound or vibration, while the wireless signal detection unit can quickly capture the wireless signals that are being transmitted and received, and indicate the location of the suspicious electronic devices through the screen, improve the efficiency of on-site security inspection, and effectively protect the privacy and security of governmental enterprises and individuals.

DESERT SENTINEL
systems security

NONLINER JUNCTION DETECTOR

AT-808

A specialized listening device that uses radio frequency technology to detect suspected mechanical displacement devices in a target area. Electronic listeners can detect electronic pointer timed detonators and mechanical timed detonators hidden under various packaging coverings. Electronic triggering devices include timed triggering devices made from electronic meters, pagers and various types of remote control devices. Electronic listener support local and remote listening function, and can be used with drones and robots to realize remote control distortion-free listening function, to facilitate the remote operation of explosive detonation devices in the scene of security clearance clearance work. At the same time, electronic listeners can also be used as anti-reconnaissance security technology equipment, used to detect electronic eavesdropping devices and hidden video devices.

DESERT SENTINEL
systems security

Product category

EMERGENCY SAFETY INSPECTION

DESERT SENTINEL
systems security

EMERGENCY SAFETY INSPECTION

AT-817 CELL PHONE DETECTOR GATE

AT-817 Cell Phone Detector Gate using independent research and development of cell phone detection technology to achieve metal classification detection, which will be divided into the metal of the cell phone class metal, household goods metal, contraband metal, and can be flexibly combined to set up four modes. Rapidly alarm the cell phone devices carried by the human body in the area, with high detection sensitivity.
It is mainly applied to the entrances and exits of government and enterprise scientific research and confidential places, confidential places of commercial organizations, high-end electronic manufacturing factories, examination halls, etc., which can prevent the entry and exit of prohibited cell phones, electronic products, eavesdropping and photo-tapping, storage media, and target objects that require control.

DESERT SENTINEL
systems security

Product category

FREQUENCY & SIGNAL JAMMING

DESERT SENTINEL
systems security

FREQUENCY & SIGNAL JAMMING

AT-501 5G WIRELESS SIGNAL JAMMER

A 5G cell phone signal jammer that meets the certification standards of authoritative Chinese institutions, using SDR signaling-level jamming technology to accurately block 2G/3G/4G/5G mobile communication signals from the four major operators including China Mobile, China Unicom, China Telecom, and China Broadnet, as well as wireless communication signal transmissions such as 2.4G (WiFi/Bluetooth) in indoor environments. The equipment is green and safe, widely used in confidential units such as the Party, government, military, various ministries and commissions, and military industrial groups.

It can be widely used in government, public security, justice, prisons, military, educational examinations, enterprises and other fields:
strictly controlled areas: prisons, detention centers, major exams to prevent cheating, business security: R&D core technology, intellectual property protection, classified and sensitive departments, etc, confidential meetings: major confidential meetings of party and government organizations and enterprises, closed bid evaluation, etc, production security: gas stations, oil depots prohibit phone calls to prevent explosions and other accidents, production lines and workshops to ensure production safety and efficiency.

DESERT SENTINEL
systems security

FREQUENCY & SIGNAL JAMMING

AT-505 VEHICLE-MOUNTED FREQUENCY JAMMER

AT-505 Vehicle-mounted Frequency Jammer, integrated design as a vehicle-mounted luggage, with good concealment, can not be seen as a jamming car. It is widely used in scenarios that require wireless signal blocking, such as explosive disposal, anti-terrorism, and technical detection. It can effectively jam signals such as remote control devices (including UAV and unmanned vehicles), digital walkie-talkies, 2G/3G/4G mobile phones (TD-LTE and FDD-LTE), 5G mobile phones (2.6G\3.5G\4.8G\4.9G), Bluetooth, 2.4G/5.8G WI-FI, etc.

Applied to the detonation, technical investigation and other need for wireless signal jamming and control.

DESERT SENTINEL
systems security

Product category

ANTI-RECORDING

DESERT SENTINEL
systems security

ANTI-RECORDING

AT-301 AUDIO JAMMER CONTROL TERMINAL

A recording shielding system control terminal, with excellent multi-point equipment centralized control capability, can realize the convenient control and efficient management of all recording shielding equipment in large-scale confidential conference rooms.AT-301 supports up to 32 devices large-scale network access, in a wide range of deployment needs, can be connected to the network through wired or wireless connection, you can in the palm of your hand on the screen or management platform, you can individually or centrally start/shut down the recording shielding equipment, can monitor and trace the working status of the deployment area shielding, and set the timer off and other functions.

You can individually or centrally start/shut down the recording shielding equipment on the palm-sized screen or management platform, monitor and trace the shielding status of each deployment area, and set up timer shutdown and other functions.

ANTI-RECORDING

AT-315/316 UNDER-DESK/DESKTOP AUDIO JAMMER

AT-315/316 is specially designed for the conference room scene recording shielding, the use of independent research and development of the Wave Shield™ ultrasonic mixer and non-linear acoustic mixing technology, through the issue of the human ear can not be perceived by the random noise ultrasonic, affect and cover the cell phone, video camera, and other types of electronic equipment recording sound recording to achieve the effect of interference with the audio, hindering the effect of the recordings, the true sense of sensory-free!

You do not need to worry about the interference of the audio can be restored, AT-315/316 issued by the band noise ultrasonic disorder and randomness, can not be corrected through the later technology and means of restoration, to completely avoid the risk of information leakage and dissemination of the AT-315/316 support for the meeting room area and table size with different numbers of devices, and to achieve the unified control of the network.

DESERT SENTINEL
systems security

ANTI-RECORDING

AT-331 CELL PHONE AUDIO JAMMER

A recording shield designed for cell phones, using an independent cell phone security island design, only need to place the phone casually, you can automatically sense the second to open the recording shielding function, and at the same time provide wireless charging services for cell phones, which carries superior performance of self-research ultrasonic mixer, superimposed on the cutting-edge non-linear acoustic mixing technology, which can send out the human ear can not perceive the random noise ultrasonic waves, so as to cover the normal voice recording, the Efficiently prevent illegal eavesdropping and recording of malicious cell phone eavesdropping hardware and software, no harsh noise, no harmful electromagnetic radiation, non-reducible, even if the device is in front of you, the whole process is senseless, safe, and does not affect normal calls and Internet.

Main application occasions: personal office, private conversation, living and living, etc.

DESERT SENTINEL
systems security

ANTI-RECORDING

AT-336 CELL PHONE AUDIO JAMMER (4 SLOTS)

is protected by four cell phones, built-in high-capacity batteries for flexibility of movement and placement in any corner where an ultrasonic mixer of its own design and advanced technology is used nonlinear acoustic mixing.

The screen for recording cell phones, for centralized management, in accordance with the confidentiality requirements imposed on large units, places, centralized management of cell phone storage, multi-slot device design,

The ultrasonic band-pass noise screen completely covers the normal sound.

This eliminates the illegal listening and recording of cell phones without deafening sound and harmful electromagnetic radiation throughout the entire process, which significantly improves the efficiency of communication management at conferences and seminars and prevents the leakage of confidential information.

DESERT SENTINEL
systems security

ANTI-RECORDING

AT-333 BLUETOOTH SPEAKER AUDIO JAMMER

A camouflage recording screen of a Bluetooth speaker equipped with an ultrasonic mixer of Wave Shield™'s own design, the use of nonlinear acoustic mixing technology, the function of screening sound recording and reproduction in one device, the condition of which others do not know, illegal recording equipment for transmitting noisy ultrasonic signals, the entire process of the human ear is undetectable, there is no radiation, for To achieve full coverage of the recorded voice, the sound cannot be restored.

Effectively protects the message content from illegal recording and theft, and has excellent concealment and security.

The AT-333 has a polygonal design with acoustic shielding, a large 270° coverage angle, built-in high-capacity batteries and long battery life.

It can be flexibly moved and placed in the office, small conference rooms, meeting rooms, symposiums and any other meeting space.

DESERT SENTINEL
systems security

Product category

LONG SWORD SERIES ANTI-DRONE LASER SYSTEM

LONG SWORD SERIES ANTI-DRONE LASER SYSTEM

X SERIES

PRODUCT CATEGORY:

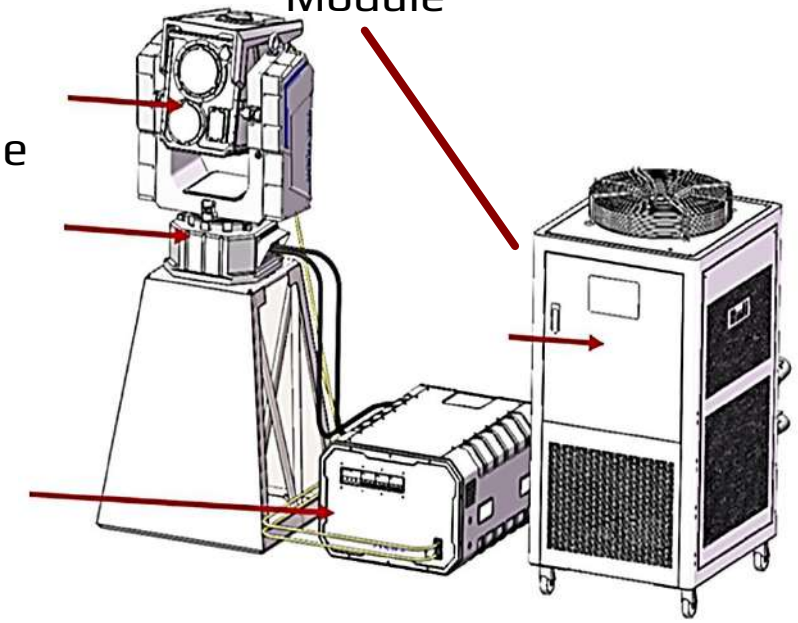
LONG SWORD-X1 (ZLS-3000X1)

Main Unit Module

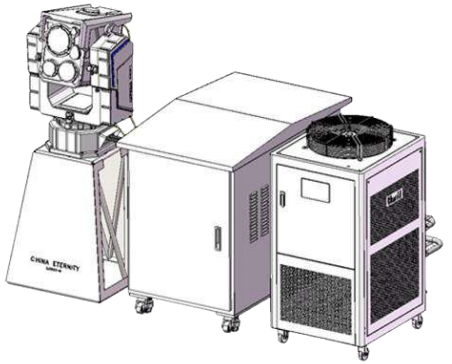
Cooling Module

Rotating Platform Module

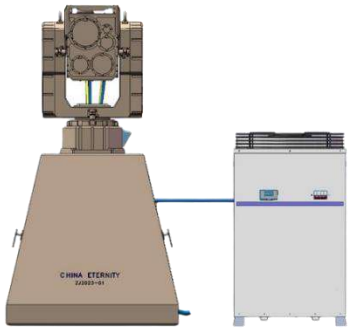
Optoelectronic Power Box Module



LONG SWORD-X2（ZLS-3000X2)



LONG SWORD-X3（ZLS-3000X3）



DESERT SENTINEL
systems security

LONG SWORD SERIES ANTI-DRONE LASER SYSTEM

X SERIES

MAIN FUNCTIONS:

— Detect and intercept "low altitude, slow speed
and small size"dronetargets within effective range;
— Unattended operation and operator command interception withexternal svstem access;
— Recognition and processing "low altitude, slow
speed and small size"drone targets in complex urban backgrounds;
— Data logging and storage;
— Rapid withdrawal, dismantling and transport, and rapid deployment

— High recognition rate, accurately target the object under all kinds of complex environments;
— Modular design, quick disassembly and transportation;
Simple interface, integrate into multiple types of defense system;
— Convenient operation, 1 person can control it remotely;
— No electromagnetic radiation to the surrounding environment;
— Fast response, accurate attack, no collateral damage;
— Innovative optical design, long and high density power

DESERT SENTINEL
systems security

LONG SWORD SERIES ANTI-DRONE LASER SYSTEM

X SERIES

KEY ADVANTAGES:

— Optimized optical design: good beam quality (outlet β: 1.4), high density power;
— Module design: independent and compact modules, enabling convenient transportation;
— Standard interface: all interfaces are standard, quick assembly and disassembly, reliable to use;
— More integrated: industrial cabinet of X2 integrated under the turntable;
— High adaptability: adaptable to 55℃ temperature, applied to humid and salty environment.

Host turntable
The host turntable mainly searches, detects, identifies, tracks, and attacks target, with a pitch angle between -20 to 60 degrees

Cabinet
the cabinet includes main lasers, control computers, etc

Water cooling system
Provide cooling for the host.

DESERT SENTINEL
systems security

LONG SWORD SERIES ANTI-DRONE LASER SYSTEM

X SERIES

SPECIFICATIONS:

— Interception distance: 1.0 km (@typical target,10 km visibility, Rcs=0.01m2)
— Detection distance: 2.0 km
— Aiming accuracy: 20urad
— Laser source power: 3.0kW
— Pitch angle:-20°~ +60°
— Azimuth: ±170°
— Power consumption: ≥ 14kW
— Storage environmental temp: -20℃~60℃
— Operation environmental temp: -20℃~55℃
— Maximum solar irradiance: 1120W/㎡
— Adapt to the complex electromagnetic &
— lighting environment of the city
— Highest altitude: 3000m

DESERT SENTINEL
systems security

LONG SWORD SERIES ANTI-DRONE LASER SYSTEM

LONG SWORD-Q1 SERIES (ZLS-3000Q1)

FEATURES

— Conduct the mission of countering drones when the vehicle is moving
— Be able to detect, recognize, capture, track and attack the dr/ones independently, without the guidance of radar;
— Be able to detect and recognize the targets in complex environments;
— 360-degree search and attack the drones.
— Mobile high energy laser defense system.
— Used to prevent invasion, attack, investigation, photographing of “low, slow and small” UAVs
— Applied to VIP security, government offices, airports, and large-scale events in need of low-altitude security.

DESERT SENTINEL
systems security

LONG SWORD SERIES ANTI-DRONE LASER SYSTEM

LONG SWORD-Q1 SERIES (ZLS-3000Q1)

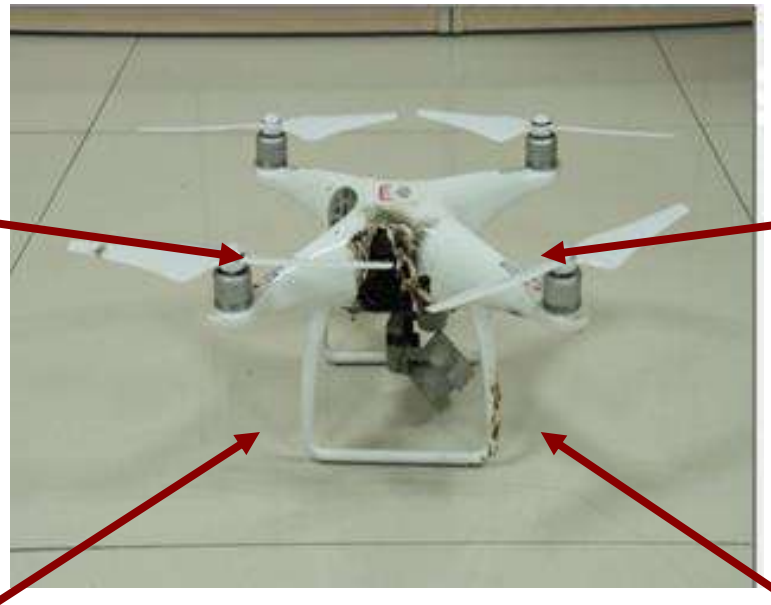
SPECIFICATIONS:

- Interception distance:1.0km(@typical target,10km visibility,RCS=0.01m²)
- Detection distance:2.0km
- Aiming accuracy:20μrad
- Laser source power:3.0kW
- Pitch angle:-5°～+70°
- Azimuth:0°～+360°
- Power consumption:≥14kW
- Storage environmental temp.:-25℃~50℃
- Operation environmental temp.:-20℃~45℃
- Duration of single laser output:≤120s
- System beam quality β:≥1.6
- Firing aperture:Φ120mm

DESERT SENTINEL
systems security

LONG SWORD SERIES ANTI-DRONE LASER SYSTEM

LONG SWORD-Q1 SERIES (ZLS-3000Q1)



Several Usage Scenarios

Head Offices, airports, dams, oil depots, nuclear, ower plants, VIP escorts, important military targets, order defense, combat command center

DESERT SENTINEL
systems security

Product category

FIXED TYPE

DESERT SENTINEL
systems security

FIXED TYPE

DR200-ABC

The device is based on multi-sensor fusion technology and integrates various technologies such as radio detection, protocol decoding, electromagnetic jamming, navigation spoofing, and networked supervision. It combines scanning, detection, jamming, and spoofing into a single unit, enabling linkage between one detection module and multiple jamming modules. This facilitates the establishment of a comprehensive low-altitude defense system for both domestic and international deployment.

Specifications:

Detection Frequency Range	70MHzвЂ“6GHz
Key Detection Frequencies	800MHz, 900MHz, 1.2GHz, 1.4GHz, 2.4GHz, 5.2GHz, 5.8GHz
Detection Range	>10 km (depending on conditions)
FPV Video Detection	500MHzвЂ“6GHz, Range >1.5 km
Azimuth Range	360В°, Pitch: 90В°
Jamming Frequency Range	700MHzвЂ“5860MHz (refer to full list)
Jamming Distance	в‰Ґ3 km
Spoofing Range	1вЂ“3 km (GPS, GLONASS, BD), Activation <4s
Direction-Finding Accuracy	в‰¤3В° RMS
Operating Temperature	-40в„ѓ ~ +60в„ѓ
Weight	в‰¤15kg (detection), в‰¤35kg (jamming)
Dimensions	Detection Unit: 400Г—370 mm

DESERT SENTINEL
systems security

FIXED TYPE

DR200-A

Using radio detection and protocol analysis technology, the device can identify drone types, electronic fingerprints, and perform identification, early warning, positioning, and tracking. It provides accurate information for follow-up defense operations.

Specifications:

Detection Frequency Range	70MHz–6GHz
Key Detection Frequencies	800MHz, 900MHz, 1.2GHz, 1.4GHz, 2.4GHz, 5.2GHz, 5.8GHz
Detection Range	>10 km (depending on conditions)
FPV Video Detection	500MHz–6GHz, Range >1.5 km
Azimuth Range	360°, Pitch: 90°
Jamming Frequency Range	700MHz–5860MHz (refer to full list)
Jamming Distance	≥3 km
Spoofing Range	1–3 km (GPS, GLONASS, BD), Activation <4s
Direction-Finding Accuracy	≤3° RMS
Operating Temperature	-40°C ~ +60°C
Weight	≤15kg (detection), ≤35kg (jamming)
Dimensions	Detection Unit: 400×370 mm; Jamming Unit: 465×275×510 mm

DESERT SENTINEL
systems security

FIXED TYPE

DR200-C

The device offers high performance in drone detection, identification, interference, jamming, and long-distance operation. It operates autonomously without supervision, detecting and neutralizing drones by forcing them to hover, land, or return. It helps prevent unauthorized drone intrusion and ensures the safety of low-altitude airspace.

Specifications:

Detection frequency band	70MHz–6GHz full-frequency scanning, detection and display
Detection range	>10km (depends on working conditions)
FPV Video transmission detection	500MHz–6GHz full-frequency scanning, detection and display
Video transmission detection range	>1.5km (supports viewing real-time video)
Azimuth range	Horizontal: 360°, Vertical: -90°~90°
Detection response time	≤10s
Omnidirectional jamming frequency band	300MHz–390MHz, 420MHz–480MHz, 650MHz–730MHz, 740MHz–840MHz, 860MHz–930MHz, 1080MHz–1200MHz, 1200MHz–1340MHz, 1340MHz–1500MHz, 1560MHz–1620MHz, 4880MHz–5080MHz, 5870MHz–6060MHz, 5100MHz–5300MHz, 5720MHz–5860MHz, 2385MHz–2490MHz (customizable)
Directional jamming frequency band	850MHz–950MHz, 2385MHz–2490MHz, 5720MHz–5860MHz, 5100MHz–5300MHz
Jamming distance	≥3km (depends on working conditions)
Operation temperature	(-40°C~+60°C)±2°C
Weight	≤150kg
Size	1000mm×2400mm (diameter×height)
Detection frequency band	70MHz–6GHz full-frequency scanning, detection and display

DESERT SENTINEL
systems security

FIXED TYPE

DR200-S1

The device offers high performance in drone detection, identification, interference, jamming, and long-distance operation. It operates autonomously without supervision, detecting and neutralizing drones by forcing them to hover, land, or return. It helps prevent unauthorized drone intrusion and ensures the safety of low-altitude airspace.

Specifications:

Supported frequency bands	GPS L1, GLONASS L1, BDS B1
Standard interference strategy	Directional eviction mode, defense mode
Signal transmission power	≤10 dBm
Signal intrusion time	<3 s
Effective distance	0–2 km
Power consumption	≤30W
Working temperature	-40°C ~ +70°C
Weight	<16 kg
Size	385 mm*307 mm*204 mm±5 mm
Protection level	IP65

DESERT SENTINEL
systems security

FIXED TYPE

DR200-S2

The device modifies a fixed communication box, adopting a heat dissipation structure design. By enabling simultaneous interference across multiple frequency bands, it achieves full-band coverage of targeted satellite navigation receivers. It supports P-codes and M-codes simultaneously and can interfere with adaptive antennas. The system can be connected to a tablet or PC for remote control of single or multiple devices.

Specifications:

Working frequency bands	1160MHz–1300MHz, 1550MHz–1615MHz
Transmit power	0–120W (configurable per environment)
Interference distance	>15 km (varies by drone model and EM conditions)
Interference frequency points	1176.45MHz, 1207.14MHz, 1227.6MHz, 1246MHz, 1268.52MHz, 1278.75MHz, 1561.098MHz, 1575.42MHz, 1602MHz
Interference target frequency points	GPS L1 C/A, GPS L1C, GPS L1 PY, GPS L1 M, GPS L2C, GPS L2 PY, GPS L2 M, GPS L5, GLONASS G1 C/A, GLONASS G1 P, GLONASS G2 P, Galileo E1, Galileo E5a, Galileo E5b, Galileo E6, QZSS L1C, L1C/A and L1-SAIF, QZSS L2C, QZSS L5
Spoofing module (optional)	GPS L1/GLONASS R1/Galileo E1
Signal effective time	<3 s
Device power supply	External AC220V power supply
Working temperature	-20℃ ~ +55℃
Weight	≤62 kg
Device power consumption	≤3500W
Waterproof level	IP65
Size	443mm×435mm×608mm ±10mm
Supported language	Chinese, English, Russian

DESERT SENTINEL
systems security

FIXED TYPE

DR200-S3

DR200-S3 is a stationary point spoofing device that interferes with drones by generating satellite navigation signals. When affected by these signals, the drone perceives the spoofed coordinates as real, allowing its route or position to be altered. The device can simultaneously interfere with multiple navigation signals such as GPS L1 and GLONASS.

Specifications:

Supported frequency bands	GPS:1575.42+1.023MHz GLONASS: 1602.0MHz+Nx562.5kHz511kHz(n =-7~6)
Signal transmission power	≤10dBm
Effective distance	500-1000 m, adjustable in 0–500 m
Spurious emissions	30MHz – 1GHz (RBW 100kHz) < -36dBm; 1GHz – 18GHz (RBW 1MHz) < -30dBm
Frequency tolerance	$+2*10^{-6}$
Supported modes	Defense mode, drive-away mode
Signal intrusion time	<10s
Device power consumption	≤30W
Working temperature	-40℃ ~ +70℃
Weight	≤20kg (Cable not included)
Protection level	No less than IP65
Size	370mm*300mm*192mm (Length*Width*Height)

DESERT SENTINEL
systems security

Product category

PORTABLE TYPE

DESERT SENTINEL
systems security

PORTABLE TYPE

DR400-S

The DR400s is a lightweight, handheld drone jammer designed for individual use. Despite its compact form, it ensures strong defensive performance and high integration of microwave circuits and antennas. Ideal for visual-range drone interference, this device combines simplicity with power, offering quick activation and long battery life.

Specifications:

Jamming frequency band	1550MHz–1620MHz, 2400MHz–2500MHz, 5150MHz–5250MHz, 5700MHz–5900MHz
Jamming distance	>1km
Working temperature	-40℃ ~ +60℃
Usage	Handheld, carried on the waist and back
Battery	Two built-in low temperature resistant lithium batteries
Weight	≤2kg (Including the battery)
Size	355mm×60mm×255mm (Length×Width×Height)

DESERT SENTINEL
systems security

PORTABLE TYPE

DR400-A

Based on radio frequency spectrum sensing, the device has the functions of detection, display, and control. It adopts self-developed low power consumption digital receiver technology, signal detection algorithm and drone identification algorithm. An ultra-wideband antenna is externally connected. It can achieve extremely low false alarm rate in complex electromagnetic environments. It can accurately identify multiple types of drones such as quad-rotor, fixed-wing, DIY, and FPV drones, and then offer optional sound, light, and vibration alarm.

Specifications:

Detected types	Mainstream brand drones such as DJI, Autel and Hubsan, as well as most FPV drones and DIY drones, etc.
Frequency band	Supports 70MHz–6.2GHz customized scanning (default: 400MHz, 800MHz, 900MHz, 1.2GHz, 1.4GHz, 2.4GHz, 5.2GHz, 5.8GHz)
Detection radius	≥1.5km (good electromagnetic environment)
Detection response time	≤3s (8 frequency bands); ≤5s (12 frequency bands)
Detection principle	Spectrum feature identification, spectrum power identification
Alarm types	Sound, vibration, light
Power supply method	Removable lithium battery
Battery life	≥6h
Screen size	3.5 inches
Device size	199mm*75mm*40mm (antenna not included)
Operation temperature	-20℃~+50℃
Supported language	Chinese, English, Russian (supports customization)

DESERT SENTINEL
systems security

PORTABLE TYPE

DR400-B

The DR400-B is a portable drone detection and communication device that leverages radio frequency spectrum sensing and AI technology to detect, display, and control unauthorized drone activities. It supports encrypted voice communication for team alerts and integrates a self-developed low-power digital receiver and ultra-wideband antenna. The DR400-B effectively identifies various drone types, including quadcopters, fixed-wing, DIY, and FPV drones, and issues alerts through sound, light, vibration, and voice.

Specifications:

Recognition type	Most mainstream brand drones and most FPV drones
Detection frequency bands	Supports customizable scanning from 70 MHz to 6.2GHz; defaults include 400 MHz, 800 MHz, 900 MHz, 1.2 GHz, 1.4 GHz, 2.4 GHz, 5.2 GHz, 5.8 GHz
Detection range	≥1.5 km
Detection response time	≤3 seconds
Detection principle	Spectrum scanning and spectrum feature recognition
Warning methods	Sound, vibration, light
Communication range	≥500m (open and unobstructed)
Power supply	Removable lithium battery
Battery life	Detection host >6 hours; Team terminal >10 hours
Operating temperature	-20°C ~ +50°C
Supported languages	Chinese, English, Russian (supports multilingual customization)
Dimensions	199mm*75mm*40mm (detection host); 117mm*56mm*37mm (team terminal)

DESERT SENTINEL
systems security

PORTABLE TYPE

DR400-D

The DR400-D is a portable FPV detection and video transmission capture device that combines full-frequency detection, video transmission signal recognition, display, control, video recording, and storage into one compact unit. It accurately identifies various types of drones — including quad-rotor, fixed-wing, DIY, and FPV models — even in complex electromagnetic environments.This device can trigger sound, light, and vibration alarms when a drone is detected. It is ideal for operations such as routine patrols, critical asset protection, team coordination, investigations, and digital forensics.

Specifications:

Detection type	Mainstream drones and most FPV, DIY drones, etc.
Detection frequency band	Supports customized scanning of 70MHz-6.2GHz, default bands include 400MHz, 800MHz, 900MHz, 1.2GHz, 1.4GHz, 2.4GHz, 5.2GHz, 5.8GHz (others can be customized)
Detection radius	≥1.5km (good views and electromagnetic environment)
FPV Video transmission signal detection	Supports the detection of all analog video transmission signal within the 500MHz-6GHz frequency bands (supports customization)
Video capture distance	≥1.5km (good views and electromagnetic environment)
Team linkage alarm	≥500m (open and unobstructed environment)
Detection response time	≤3s (8 frequency bands)
Detection principle	Spectrum scan, spectrum feature identification
Alarm options	Sound, vibration, light
Storage space	32G memory card
Screen size	7-inch touch screen
Power supply mode	Lithium battery
Battery life	≥6h (host), ≥10h (wrist watch)
Device size	198mm*142mm*52mm (length*width*height)

DESERT SENTINEL
systems security

PORTABLE TYPE

DR400-E

The DR400-E is a portable drone detection and wrist watch alert coordination device. It comprises a detection host and an information-receiving terminal in the form of a wristwatch. The device performs detection, display, control, and team coordination functions.Utilizing low-power ultra-wideband digital reception, advanced signal detection, and drone identification algorithms—along with a high-efficiency external antenna—the DR400-E quickly and accurately identifies various types of drones, including quad-rotor, fixed-wing, DIY, and FPV models. Alerts are generated through sound, light, and vibration signals.

Specifications:

Identified drone type	Mainstream drones and most FPV, DIY drones, etc.
Detection frequency band	Supports customized scanning of 70MHz–6.2GHz, default bands include 400MHz, 800MHz, 900MHz, 1.2GHz, 1.4GHz, 2.4GHz, 5.2GHz, 5.8GHz (others can be customized)
Detection radius	≥1.5km (good views and electromagnetic environment)
Wrist watch reception distance	≥500m (open and unobstructed environment)
Detection response time	≤3s (8 frequency bands)
Detection principle	Spectrum scan and spectrum feature identification
Alarm mode	Sound, vibration, light
Screen size	2.0 inches
Power supply mode	Removable lithium battery
Battery life	≥6h (host); ≥12h (wrist watch)
Supported Languages	Chinese, English, Russian (supports customization)
Operating Temperature	-20°C to +50°C
Device size	142mm*63mm*38mm (length*width*height)

DESERT SENTINEL
systems security

PORTABLE TYPE

DR500-AB

The DR500-AB is a portable drone detection and jamming shield system, combining advanced detection and radio jamming technologies. It delivers strong anti-drone defense and long-range operational capability. By disrupting drone control signals—such as data transmission, video feed, and navigation—it forces the drone to hover, land, or return, thereby securing airspace and critical zones from drone intrusions.The system offers full-band coverage, precise direction finding, and selectable interference modes. It can operate in extreme environments and supports mobile app and backend platform integration for flexible deployment.

Specifications:

Detection frequency band	400MHz–1500MHz, 2200–2500MHz, 5150–5950MHz
Detection range	≥2km (depends on working conditions and drone models)
Direction finding accuracy	≤10°
Azimuth range	Horizontal: 0°–360°
Jamming distance	≥2km (depends on working conditions and drone models)
Jamming frequency band	900MHz, 1.2GHz, 1.5GHz, 2.4GHz, 5.2GHz, 5.8GHz
Operation screen	≥3.5-inch touch screen to display drone frequency band, signal strength and other information
Jamming coverage angle	Horizontal≥45°, Vertical≥30°
Frequency band switching	Can select separate communication interference, separate navigation interference or full frequency interference
Network control	Can be interconnected with mobile terminal (APP) and back-end command and management platform at multiple levels (optional)
Battery life	≥20h, equipped with detection and alarm function in standby mode
Operation temperature	-40℃~+60℃
Weight	<8kg (including the battery)
Size	390mm*160mm*330mm (length*width*height)

DESERT SENTINEL
systems security

PORTABLE TYPE

DR400-S1

The DR400-S1 is a portable drone spoofing device that uses radio signal simulation technology. It features high-precision GPS signal reception and a high-gain omnidirectional transmission antenna to disrupt and spoof drone navigation signals.By broadcasting satellite navigation spoofing signals across at least two frequency bands, the device interferes with drones that rely on satellite positioning, misleading them into flying in a straight line or a circular path. It supports quick deployment, mode switching, and operates with immediate effect.

Specifications:

Supported frequency bands	GPS L1, GLONASS R1, BDS B1 (Customizable)
Signal transmission power	10mW
Effective distance	>800m
Supported modes	Straight line mode, circle mode
Signal intrusion time	≤3s
Device power consumption	≤10W
Power supply method	Powered by battery, supports battery replacement
Working temperature	-20°C ~ +55°C
Weight	701g (±10g)
Size	77mm*43mm*248mm±2mm (Length*Width*Height, antenna not included)

DESERT SENTINEL
systems security

Product category

VEHICLE-MOUNTED TYPE

DESERT SENTINEL
systems security

VEHICLE-MOUNTED TYPE

DR100-AB

The DR100-AB is a vehicle-mounted drone detection and jamming system that uses advanced radio spectrum sensing technology. It provides 360° full-frequency scanning and interference capabilities to detect and jam unauthorized drones in real-time. When engaged, it can force intruding drones to return or perform emergency landings.This equipment is designed for wide-area coverage, high mobility, and stable performance. It supports FPV video detection, blacklist/whitelist functions, and sustained operation for over 24 hours, making it ideal for critical infrastructure protection, border security, and mobile defense applications.

Detection frequency band	300MHz–6GHz full-frequency scanning, detection and display
Detection range	≥5km (depends on working conditions)
FPV Video transmission detection	500MHz–6GHz full-frequency scanning and display
Video transmission detection range	≥1.5km (supports viewing real-time video)
Detection height	0–1200m
Jamming frequency band	900MHz, 1.2GHz, 1.5GHz, 2.4GHz, 5.2GHz, 5.8GHz
Jamming distance	≥3km (depends on working conditions)
Jamming range	horizontal: 360° pitch: -90°~+90°
Working time	≥24h
Operation temperature	(-20°C~+60°C) ±2°C
Weight	64.25kg
Size	800mm*600mm (diameter*height)

DESERT SENTINEL
systems security

VEHICLE-MOUNTED TYPE

DR100-C

The DR100-C is a vehicle-mounted FPV jamming system, built specifically to neutralize the threat of FPV drones. It disrupts communication between drones and their remote controllers or satellite systems by emitting targeted interference signals.With full 360° jamming capability and broad customizable frequency coverage, it can be deployed rapidly in mission-critical areas. The DR100-C supports multiple jamming modes, is easy to control via panel or software, and is built to meet high military-grade standards.

Jamming frequency band	220MHz~300MHz, 300MHz~400MHz, 400MHz~500MHz, 500MHz~620MHz, 620MHz~780MHz, 740MHz~880MHz, 860MHz~1020MHz, 1080MHz~1220MHz, 1220MHz~1360MHz, 2400MHz~2500MHz, 5100MHz~5300MHz, 5680MHz~5900MHz (customizable)
Band power	Each band ≥ 30W
Jamming range	0–1 km (depending on conditions)
Jamming direction	360°
Response time	< 5 seconds
Power supply	AC220V/110V
Power consumption	≤1000W
Control method	Panel control or software control
Operation temperature	-40°C~+60°C

DESERT SENTINEL
systems security

Product category

HANDHELD TYPE

DESERT SENTINEL
systems security

HANDHELD TYPE

DR300-1 (6 BANDS)

The DR300-1 (6-band version) is a handheld drone detection and jamming device designed for fast, field-deployable defense against small, low-flying drones. Using radio frequency scanning, decoding, and precise jamming, it can interrupt remote control, navigation, and video transmission signals, forcing drones to land or return.This compact and rugged system operates across six frequency bands and is equipped with two low-temperature-resistant lithium batteries for 24+ hours of continuous use. Its lightweight build and integrated design make it ideal for tactical response teams and mobile defense.

Detection frequency band	2.4GHz, 5.8GHz (supports expansion)
Detection range	≥2km (depends on working conditions)
Jamming frequency band	800/900MHz, 1.2GHz, 1.4GHz, 1.5GHz, 2.4GHz, 5.8GHz
Jamming distance	≥2km (depends on working conditions)
Battery life	≥24h
Operation temperature	-40°C~+60°C
Battery	Two built-in low temperature resistant lithium batteries
Weight	≤5kg (including the battery)
Size	661mm*88mm*250mm (length*width*height)
Language	Chinese, English, Russian

DESERT SENTINEL
systems security

HANDHELD TYPE

DR300-1 (8 BANDS)

The DR300-1 (8-band version) is a handheld drone detection and jamming system designed with advanced RF scanning and decoding capabilities. It can identify and neutralize small, low, and slow drones by jamming remote control, image transmission, and navigation signals, forcing drones to return or land.This version includes enhanced detection coverage across a wider frequency range and features an integrated alarm system. It supports multiple usage modes (fixed or handheld), real-time positioning, and extended battery life.

Detection frequency band	400MHz~1500MHz, 2200MHz~2500MHz, 5100MHz~5900MHz
Detection range	≥2km (depends on working conditions)
Jamming frequency band	800MHz, 900MHz, 1.2GHz, 1.4GHz, 1.5GHz, 2.4GHz, 5.2GHz, 5.8GHz
Jamming distance	≥2km (depends on working conditions)
Battery life	≥24h
Operation temperature	-40°C~+60°C
Network & positioning	Support device positioning
Alarm mode	Alarm with sound and indicator light
Usage	Fixed, handheld, etc.
Battery	Two built-in low temperature resistant lithium batteries
Weight	≤6.5kg (including the battery)
Size	770mm*110mm*305mm (length*width*height)
Language	Chinese, English, Russian

DESERT SENTINEL
systems security

HANDHELD TYPE

DR300 (6 BANDS)

The DR300 is a powerful handheld jamming device designed for long-range interference of drone operations. It effectively disrupts remote control, image transmission, and satellite navigation signals of small, low-altitude, and slow-moving drones, forcing them to return or land.Equipped with two built-in low temperature resistant lithium batteries, this compact jammer operates across six key frequency bands. Its efficient design supports more than 24 hours of use and is tailored for military, law enforcement, and critical security deployments.

Jamming frequency band	800/900MHz, 1.2GHz, 1.4GHz, 1.5GHz, 2.4GHz, 5.8GHz
Jamming distance	≥2km (depends on working conditions)
Battery life	≥24h
Operation temperature	-40°C~+60°C
Battery	Two built-in low temperature resistant lithium batteries
Weight	<5kg (including the battery)
Size	688mm*85mm*208mm (length*width*height)

DESERT SENTINEL
systems security

HANDHELD TYPE

DR300 (8 BANDS)

The DR300 (8-band) is a handheld jamming device that uses advanced radio frequency scanning and electromagnetic suppression technology. It detects unauthorized drones and disrupts their remote control, image transmission, and navigation signals, forcing them to land or return.Designed for rugged use, it features enhanced scalability, strong battery life, and high interference precision across 8 frequency bands. With over 2 km of effective jamming distance, it is ideal for high-security missions.

Jamming frequency band	400MHz, 900MHz, 1.2GHz, 1.4GHz, 1.5GHz, 2.4GHz, 5.2GHz, 5.8GHz
Jamming distance	≥2km (depends on working conditions)
Operation temperature	-40°C~+60°C
Battery	Two built-in low temperature resistant lithium batteries
Weight	6.5kg (including the battery)
Size	797mm*92mm*270mm (length*width*height)

DESERT SENTINEL
systems security

Product category

RADAR AND ELECTRO-OPTICAL SYSTEM

DESERT SENTINEL
systems security

RADAR AND ELECTRO-OPTICAL SYSTEM

CORETALON KU-BAND PHASED ARRAY RADAR

The radar system is a 3D solid-state phased array radar designed for low-altitude surveillance. It provides real-time detection and tracking of “low, slow, small” (LSS) targets such as drones and birds. It features wide-area coverage, rapid response, and high accuracy. Integrated with EO systems, it forms the backbone of a coordinated multi-layered airspace defense network.

Key Features:

— 360° all-azimuth scanning
— Dual-mode search and tracking
— Millisecond-level response time
— High target resolution
— All-weather, day/night operation
— Seamless EO integration

DESERT SENTINEL
systems security

RADAR AND ELECTRO-OPTICAL SYSTEM

CORETALON ELECTRO-OPTICAL (EO) TARGETING SYSTEM

The EO targeting unit integrates visible light and infrared sensors, enabling day/night surveillance, target recognition, and visual tracking. With a built-in AI algorithm, it can automatically detect, classify, and lock on to various aerial targets, including drones and birds. Its 3D gimbal system and wide tracking angles allow full-coverage monitoring and precise aiming.

Key Features:

— Dual-sensor (EO + IR) for day and night operation
— Automatic multi-target detection and lock-on
— Full-screen motion tracking and hot-spot search
— Real-time AI recognition (drone, aircraft, bird)
— High-precision 3D stabilized gimbal
— Full-range horizontal/vertical coverage

DESERT SENTINEL
systems security

RADAR AND ELECTRO-OPTICAL SYSTEM

INTERCEPTOR DRONE (UAV)

The CoreTalon interceptor drone is designed for high-speed, high-agility aerial defense operations. With AI-assisted flight and EO-based target acquisition, it autonomously navigates to intercept and neutralize aerial threats such as rogue drones through kinetic impact or net-capture mechanisms. It is capable of day and night missions and supports advanced waypoint navigation.

Key Features:

— AI-assisted autonomous navigation
— Max speed up to 35 m/s
— Day/night operation with EO + IR payload
— Kinetic or net-based engagement
— Weather-resistant (IP55)
— High-speed vertical and horizontal mobility

Product category

LOCATOR

DESERT SENTINEL
systems security

LOCATOR

H1L HANDHELD DRONE LOCATOR

H1L is a handheld device that can accurately locate drones and pilots (remote controllers).

Through deep spectrum analysis and feature recognition of drone signals, it can conduct real-time monitoring of multidimensional information such as drone serial number, model, position, speed, altitude, flight path, and pilot position within the detection range through a single device.

H1L is highly compact, lightweight, and easy to carry.

It is equipped with high-performance batteries and has a long-lasting battery life.

It can be used for low altitude safeguarding of drones in major event security tasks, public security patrols, anti-terrorism, political core areas, border defense, airports, power and petrochemical parks safety control, and other scenarios.

DESERT SENTINEL
systems security

Product category

ANTI TERRORIST

DESERT SENTINEL
systems security

ANTI TERRORIST
HANDHELD THROUGH-WALL RADAR - CEM100

The CEM100 is a compact and lightweight handheld radar device designed for life detection through walls, based on advanced UWB radar and biomedical engineering technology.

It supports multiple target detection through obstacles such as bricks, concrete, and stone, displaying real-time target distance and movement status.Ideal for emergency response scenarios such as firefighting, armed police, border patrol, and urban combat, the CEM100 enables rapid location and decision-making through real-time visualization, reliable wireless control, and long battery life.

Its user-friendly interface and military-grade durability make it a powerful tool in critical missions.

DESERT SENTINEL
systems security

ANTI TERRORIST
HAND-HELD 2D THROUGH WALL RADAR CEM120

Hand-held 2D Through Wall Radar CEM120 is a vital sign detection device by integrating UWB radar and biomedical engineering technology.

This product can penetrate obstacles such as building walls and obtain information such as the location and numbers of human targets behind it in real time.

It has the characteristics of strong penetration, small and portable, and can be controlled with one hand.

It is widely used in penetrating reconnaissance scenarios such as counter-terrorism, hostage rescue, urban street fighting, and border inspection.

DESERT SENTINEL
systems security

ANTI TERRORIST

PORTABLE TWO DIMENSIONAL POSITIONING THROUGH WALL RADAR CEM200

CEM200 is a rugged and compact 2D through Wall Radar designed for fast detection and tactical entries.

It provides necessary situational intelligence within a room in time by quickly scanning the inner structure and accurately analyze the target location, numbers and layout.

The product adopts MIMO ultra-wide band radar system, with function of high resolution in long-range, multi-target detection, and real-time two-dimensional position-ing.

CEM200 has the advantages of high protection level, small size, light weight, easy to carry, good penetration, fast response, support for split-screen display, and can be used by a single soldier, which is widely applied for variety of emergency search tasks include but not limited to street fighting, counter terrorism, hostage rescue, border security, etc.

DESERT SENTINEL
systems security

ANTI TERRORIST

HIGH ACCURACY TWO DIMENSIONAL THROUGH WALL RADAR CE200

CE200 through-wall radar is a high-performance human target search device launched by Novasky.

The working principle is based on Doppler effects generated on the radar echo by weak movements such as human respirato-ry heartbeat, body shaking, limb swinging, and utilize radar signal processing algorithm to analyze and calculate the target position information behind obstacles.

The product adopts the MIMO ultra-wide band radar system, which has the functions of high resolution in long-range, multi-target detection, and real-time two-dimensional positioning.

It can quickly obtain the number and layout of targets behind walls and other obstacles, and is widely used in national defense and military, public security, armed police, border defense and other fields for target search tasks.

DESERT SENTINEL
systems security

ANTI TERRORIST

THREE DIMENSIONAL IMAGING THROUGH WALL RADAR CEM400

CEM400 is a 3D Imaging through wall radar, majored forgathering real-time and accurate intelligence of liveobjects from behind solid walls or barriers to help themission executor determining the necessary tactical plan

ning with crucial information including life presence ofboth moving and static target, target location, target numbers, target moving path, internal structure of the building.

CEM400 delivers mission-critical information when andwhere it is needed, providing unprecedented situationalawareness, which can effectively reduce the risk of casual

ties of combat personnel, conduct tactical assaults, andimprove the combat missions success rate.

It is applicablefor a variety of emergency search and high risk combatmission carried by police, armed forces, law enforcementagencies, search and rescue organizations, etc.

DESERT SENTINEL
systems security

ANTI TERRORIST

PORTABLE THREE DIMENSIONAL IMAGING THROUGH WALL RADAR CEM420

CEM420 3D through wall radar is a vital sign detectiondevice based on UWB radar technology and biomedical engineering technology.This product can penetrate obstacles such as building walls, and obtainreal-time information such as 3D imaging, position, posture, and quantity of human targets behind it.

Featured with strong penetrability, good portability, high positioning accuracy, long detection distance, and intelligent posture recognition, CEM420 is widelyused in penetrating reconnaissance scenarios such ascounter-terrorism, hostage rescue, urban street fighting, and border inspection.

DESERT SENTINEL
systems security

ANTI TERRORIST

LONG-DISTANCE WALL PENETRATION DETECTION SYSTEM CEV210

The long-range wall-penetrating radar system consists of an unmanned vehicle, a long-range wall-penetrating radar, an optical video, an infrared thermal imager, a navigation and positioning instrument and a ground terminal. Adopting low-frequency ultra-wideband MIMO radar technology system, it has the advantages of convenient movement/deployment, long detection distance
and wide coverage, and can penetrate obstacles such as building walls at a long distance, detect and perceive the number of people behind the obstacles, their distribution, and the key building structure, etc. It can effectively improve the target perception capability
under non-visible conditions, and is applicable to urban street fighting, anti-terrorism and raid handling, hostage rescue and other special scenarios under the environmental Sensing tasks.

DESERT SENTINEL
systems security

ANTI TERRORIST

UAV MOUNTED THROUGH WALL RADAR CEU200

UAV Mounted Through Wall Radar CEU200 is a humantarget detection equipment that integrates UWB radar, visual sensor, and UAV flight platform.This product canapproach the exterior wall of tall building to detect andobtain information such as the location and quantity ofhuman targets behind it in real time.

Featured with characteristics of high mobility, strong penetration, and wide coverage, it is widely used in anti-terrorism, hostagerescue, Mission scenarios such as urban street fighting andfire search and rescue.

DESERT SENTINEL
systems security

Product category

LIFE SEARCH & EMERGENCY RESCUE

DESERT SENTINEL
systems security

LIFE SEARCH & EMERGENCY RESCUE

ONE DIMENSIONAL RANGING RADAR LIFE DETECTOR DN-III+

DN-III+ portable radar life detector, based on theultra-wide band radar principle, utilizes human motion

(including expansion and contraction of the chest causedby human heartbeat, breathing, and limb swings)Dopplerecho effect carried by the nanosecond electromagneticpulse with weak signal detection and other radar signalprocessing algorithms, it can carry out large-scale rapidsearch and positioning of micro-moving or statics survivors trapped in ruins, collapsed buildings, or obstacles toassist in precise rescue.

This product is light and portable, with advantagesof strong penetrability in ruins and other complex mediaand multi-target real time detection & display function, which is widely used in emergency rescue missions by thesearch and rescue team civil defense, firefighting, earthquake relief and other special industries.

DESERT SENTINEL
systems security

LIFE SEARCH & EMERGENCY RESCUE

TWO DIMENSIONAL POSITIONING RADAR LIFE DETECTOR DN-IV

The DN-IV two-dimensional positioning radar life detectoris a low-frequency ultra-wide band MIMO architecture lifedetection radar launched by Novasky for the task of quickly searching and locating living organisms in the disaster scenes such as earthquake and landslide.

The device adopts MIMO technology, and has the advantage of strong penetration ability and strong real-time positioning ability for ruins.

It can simultaneously obtain the two-dimensional coordinate information of multiple trapped human targets in the detection area, which is conducive to the accurate rescue of on-site rescue.

It can be widely used in search and rescue tasks in industries such as firefighting, USAR team, earthquake, civil defense, electric power, petroleum, petrochemical and other industries.

DESERT SENTINEL
systems security

LIFE SEARCH & EMERGENCY RESCUE

MUILTI SENSOR INTERGRATED LIFE DETECTOR DN-VI/YSF-40

This product is based on low-frequency ultra-wide band radar technology, utilizing human heartbeat and breathing signals to obtain the two-dimensional coordinates of the target to achieve the detection of weak motion or stationary living bodies buried under mines or ruins.

Based on micro-seismic principle, supplemented by the detection of the audio waves and vibration waves generated by the groaning, shouting, knocking, scribbling or crawling of people under the ground and ruins, the system will generate the location of the trapped persons and display it on the PAD.

At the same time, through audio and video technology, the sensor can reach into the ruins to check theinner situation and communicate with the trapped people.

Fusing the detection results of the three types of detection with a specific strategy, the system can ensure very accurate detection result and and improve the rescue efficiency.

DESERT SENTINEL
systems security

LIFE SEARCH & EMERGENCY RESCUE

AUDIO AND VIDEO LIFE DETECTOR KE-V7

The audio and video life detector is an emergency rescueequipment for both land and water.

Searching and locatingtrapped persons, fast visual inspection of suspicious targetareas through audio and video probes, and images oftrapped persons in non-visual environments can beobtained, sound and other information, and can search forlife in a completely dark environment through infraredthermal imaging probes, so that rescuers can quickly andaccurately be informed of real situation of the area wherepeople trappd.

DESERT SENTINEL
systems security

LIFE SEARCH & EMERGENCY RESCUE

LIGHTWEIGHT MICRO-DEFORMATION MONITORING RADAR HAWK-R2(S)

HAWK-R2(S) is a lightweight and portable synthetic aperture slope radar developed by Novasky, which is mainly used for high-precision real-time deformation monitoring and early warning of slopes, and to achieve safety assurance of landslide monitoring during emergency rescue.

The system has the features of non-contact, high-precision real-time measurement, omni-directional continuous on-line measurement, all-weather without the influence of cloud, rain and fog, without the influence of vegetationblowing/animal movement, lightweight and portable, flexible deployment, simple operation and maintenance, three-dimensional interface display, and intelligent early warning.

It can be used in geological disasters, emergencyrescue, slope construction and other scenarios of monitoring tasks.

DESERT SENTINEL
systems security

LIFE SEARCH & EMERGENCY RESCUE

OMNI-DIRECTIONAL SLOPE STABILITY MONITORING RADAR SYSTEM HAWK-R5

The omni-directional slope stability monitoring radar system is mainly applied to high and steep slopes, mining areas, tailing ponds (dams), geological disasters, construction pits, water conservancy projects, towering buildings and other automated deformation monitoring.

The radar system adopts the rotary scanning ground-based ArcSAR architecture, which solves the problem that the field of view of the traditional ground-based SAR system cannot cover all the surrounding scenes in one observation due to the antenna scanning along the straight line track, and is not easy to be interfered by the vegetation on theslope surface, and at the same time it is not sensitive to themovement of the vehicles and the people working on the slope, so it is suitable for the long-term fixed monitoring and on-siteemergency monitoring.

DESERT SENTINEL
systems security

Product category

BREEDING SYSTEM

DESERT SENTINEL
systems security

BREEDING SYSTEM

BORDER AND COASTAL DEFENSE AQUACULTURE SYSTEM

Border and coastal defense aquaculture system is an intelligent terminal security software system based on the intelligent linkage of radar and security equipment and the integration and analysis of detection information developed by our company for Marine intelligent farming.

Its business includes target detection, linkage tracking, capture forensics, intelligent early warning, event backtracking and other functions.

Thesystem has achieved the lowest false alarm rate and the optimal level of intelligent classification alarm in theindustry regardless of weather conditions.

DESERT SENTINEL
systems security

Product category

ELECTRONIC SENTRY

DESERT SENTINEL
systems security

ELECTRONIC SENTRY
UNATTENDED BORDER SECURITY SYSTEM

The Electronic Sentry is an intelligent, modular security system designed for border and coastal surveillance. It operates autonomously and integrates detection, data aggregation, and mobile terminal capabilities into one flexible platform. Designed for quick deployment and harsh environments, the system provides early warning, real-time monitoring, and data-driven response to illegal crossings, smuggling, and infiltration activities.

— Low power consumption, no mounting support required
— Long standby time with self-awakening capability
— Fully autonomous and unattended operation
— Rapid deployment and high concealment
— Suitable for mountain passes, islands, and blind zones
— Modular design for flexible configuration and maintenance
— Secure data transmission and device control

DESERT SENTINEL
systems security

Product category

DRONE DETECTOR

DESERT SENTINEL
systems security

DRONE DETECTOR

H1C PORTABLE DRONE DETECTOR

The H1C Portable Drone Detector is a rugged, suitcase-form UAV detection and positioning device equipped with an integrated management and control system.
It provides real-time tracking of UAV serial numbers, models, positions (latitude, longitude, azimuth), speeds, flight paths, takeoff and return points, as well as remote controller coordinates. This unit supports single-machine offline operation and rapid deployment, making it highly suitable for mission-critical low-altitude security tasks in sectors such as public security, counter-terrorism, military zones, border defense, and critical infrastructure protection.

Key Features:
— Real-time UAV signal analysis and flight data tracking
— Displays pilot position, UAV model, ID, trajectory, altitude
— Portable suitcase design with integrated GNSS, antennas, display, and control
— Customizable GIS interface with map tools and alerts
— Operates autonomously or via remote control with external keyboard/mouse
— Supports whitelist, detection playback, data export, and analytics
— Designed for rapid mobile deployment and field operations

DESERT SENTINEL
systems security

Product category

UAV FIBER OPTIC VIDEO TRANSMISSION MODULE

DESERT SENTINEL
systems security

UAV FIBER OPTIC VIDEO TRANSMISSION MODULE

AERO GUARDIAN CRYSTAL LINK

The AERO GUARDIAN Crystal Link drone optical fiber image and data module utilizes optical fiber as its transmission medium, offering fast transmission speeds and strong stability. It can meet the transmission requirements for large data volumes, remains unaffected by electromagnetic interference, prevents eavesdropping, and supports wired signal transmission up to a distance of 10km.

Key Features:
— Tamperproof
— Stable and reliable
— 0~10km long distance communication
— Ignore terrain obstruction
— Prevent eavesdropping and theft
— High speed transmission of big data

DESERT SENTINEL
systems security

UAV FIBER OPTIC VIDEO TRANSMISSION MODULE

AERO GUARDIAN CRYSTAL LINK

Crystal Link Sky End

Power supply：DC 9V~26V (3~6S Battery)
Shell material：aluminum alloy
Body size：66.6mm*45mm*18mm
Weight：54g± 2g

Crystal Link Ground End

Power supply：3-6S Battery
Shell material：aluminum alloy
Body size：
123mm*56mm*31mm
Weight：186g±2g

DESERT SENTINEL
systems security

Product category

CAMERA SERIES

CAMERA SERIES

U2

Micro Prime Lens Dual EO Sensors Object Tracking Gimbal Camera

Imager sensor	1/3" CMOS
Lens 1	2.4mm Prime lens, FOV 96.5°×55.3°
Lens 2	10.36mm Prime lens, FOV 30°×17.1°
Resolution	1920x1080@30fps
Object Tracking	✓
Working voltage	12V
Output	IP
Control method	UART / S.BUS / TCP
N.W.	77g
Dimension	40*40*70mm

U818M

Micro Prime Lens EO/IR with LRF Object Tracking Gimbal Camera

Imager sensor	CMOS
Lens	6mm Prime lens, FOV 38.3°x22.1°
Resolution	1920x1080
IR Thermal Imager	640x512@50fps, 18mm focus length, 12μm
Laser range	5-1200m
Object Tracking	✓
Working voltage	12V
Output	IP
Control method	UART / S.BUS / TCP
Local storage	SD card up to 512G
N.W.	305g
Dimension	81*62.9*106.7mm

U818

Micro Prime Lens EO/IR Object Tracking Gimbal Camera

Imager sensor	CMOS
Lens	6mm Prime lens, FOV 38.3°×22.1°
Resolution	1920x1080@60fps
IR Thermal Imager	640x512@50fps, 18mm focus length, 12μm
Object Tracking	✓
Working voltage	12V
Output	IP
Control method	UART / S.BUS / TCP
Local storage	SD card up to 512G
N.W.	260g
Dimension	67.6*61.6*99.3mm

U7DE

Micro Prime Lens Dual EO Object Tracking Gimbal Camera

Imager sensor	CMOS
Lens 1	7.2mm Prime lens, FOV 42.28°x24.54°
Lens 2	25mm Prime lens, FOV 12.71°*7.17°
Resolution	1920x1080@50fps
Object Tracking	✓
Working voltage	12V
Output	IP
Control method	UART / S.BUS / TCP
Local storage	SD card up to 512G
N.W.	251g
Dimension	67.6*61.6*99.3mm

CAMERA SERIES

U7DER

Micro Prime Lens Dual EO/IR Object Tracking Gimbal Camera

Imager sensor	CMOS
EO lens 1	7.2mm Prime lens, FOV 42°x24.5°
EO lens 2	25mm Prime lens, FOV 12.7°x7.1°
Resolution	1920x1080@60fps
IR Thermal imager 1	640x512@60fps, 13.5mm focus length, 12μm
IR Thermal imager 2	640x512@60fps, 35mm focus length, 12μm
Object Tracking	✓
Working voltage	12V
Output	IP
Control method	UART / S.BUS / TCP
Local storage	SD card up to 512G
N.W.	505g
Dimension	95.5*86.7*135.6mm

U8L

Micro Prime Lens Single EO with LRF Object Tracking Gimbal Camera

Imager sensor	CMOS
Lens	8mm Prime lens, FOV 38°x22°
Resolution	1920x1080@60fps
Laser range	5-1500m
Object Tracking	✓
Working voltage	12V
Output	IP
Control method	UART / S.BUS / TCP
Local storage	SD card up to 512G
N.W.	249g
Dimension	67.6*61.6*99.3mm

A609R

Micro Prime Lens EO+IR+LRF Triple-sensor AI Object Tracking Gimbal Camera

Imager sensor	1/2.9" CMOS Sensor
Lens	6mm Prime lens, FOV 50 x 28°, 12x digital zoom
Total pixel	2MP
IR Thermal imager	640x512, 9.1mm focus length, 12μm
AI Function	Human/Vehicle AI identification and tracking
Laser range	5~1200m
Object Tracking	✓
Working voltage	16V
Output	IP
Control method	UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	235g
Dimension	76*62*106.2mm

A609

Micro Prime Lens EO/IR Dual Sensors AI Object Tracking Gimbal Camera

Imager sensor	1/2.9" CMOS
Lens	6mm Prime lens, FOV 50 x 28°, 12x digital zoom
Total pixel	2MP
IR Thermal imager	640x512, 9.1mm focus length, 12μm
AI Function	Human/Vehicle AI identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	IP
Control method	UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	190g
Dimension	69*52*96.2mm

CAMERA SERIES

A10 Pro

10x EO AI Object Tracking Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	10x optical zoom, f=4.7~47mm
Total pixel	5.13MP
AI Function	Human/Vehicle AI identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080P micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	510g
Dimension	96*121.5*157.9mm

A10T Pro

10x EO+IR Dual Sensor AI Object Tracking Gimba Cameras

Imager sensor	1/2.8" SONY CMOS
Lens	10x optical zoom, f=4.7~47mm
Total pixel	5.13MP
IR Thermal Imager	640*512, 19mm focus length, 25Hz, 12μm
AI Function	Human/Vehicle AI identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	582g
Dimension	95*121.5*157.9mm

Z30TL

30x Optical Zoom and Zoom Laser Night Vision Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
Laser range	500m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	UART / PWM / PPM / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	811g
Dimension	153.7*141.0*149.6mm

AT19

19mm Single Thermal AI Object Gimbal Camera

Lens	19mm focus length
Detector pixel	640*512
Pixel size	12μm
AI Function	Human/Vehicle AI identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080P micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	462g
Dimension	78.8*110.2*129.6mm

CAMERA SERIES

A10T Pro

10x EO+IR Dual Sensor AI Object Tracking Gimba Cameras

Imager sensor	1/2.8" SONY CMOS
Lens	10x optical zoom, f=4.7~47mm
Total pixel	5.13MP
IR Thermal imager	640*512, 19mm focus length, 25Hz, 12μm
AI Function	Human/Vehicle AI identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	582g
Dimension	96*121.5*157.9mm

A10TR Pro

10x EO+IR AI Object Tracking Target GPS Coordinate Resolving and LRF Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	10x optical zoom, f=4.7~47mm
Total pixel	5.13MP
IR Thermal imager	640*512, 19mm focus length, 12μm
AI Function	Human/Vehicle AI identification and tracking
Laser range	5~1500m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	654g
Dimension	114.7*100*174.4mm

AT19

19mm Single Thermal AI Object Gimbal Camera

Lens	19mm focus length
Detector pixel	640*512
Pixel size	12μm
AI Function	Human/Vehicle AI identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080P micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	462g
Dimension	78.8*110.2*129.6mm

A20KTR

20x EO 4K Triple Sensors AI Object Tracking Target GPS Coordinate Resolving and LRF Gimbal Camera

Imager sensor	SONY 1/2.5" "Exmor R" CMOS
Lens	20x optical zoom, f=4.4~88.4mm
Total pixel	8.51MP
IR Thermal imager	640*512, 35mm focus length, 12μm, 25Hz
AI Function	Human/Vehicle AI identification and tracking
Laser range	50~3010m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP (4K)
Control method	PWM / S.BUS / TTL / TCP / UDP
Local storage	SD card up to 256G (4K)
N.W.	998g
Dimension	181*130*163.6mm

DESERT SENTINEL
systems security

CAMERA SERIES

Mini H30T

30x EO+IR+LRF Triple-sensor AI Object Tracking Gimbal Camera (Starlight level)

Imager sensor	1/1.8" STARVIS CMOS
Lens	30x optical zoom, f=6.5~162.5mm
Total pixel	4.17MP
Lux	0.009 lux
IR Thermal imager	640*512, 19mm focus length, 12μm
AI Function	Human/Vehicle AI identification and tracking
Laser range	5~1500m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	971g
Dimension	174*129.5*187.5mm

H30T Plus

30x EO+IR+LRF Wide-Angle Quad-sensor Starlight AI Object Tracking Gimbal Camera (Starlight level)

Lens 1	1/1.8" STARVIS CMOS, 30x optical zoom, f=6.5~162.5mm, 4.17MP
Total pixel	0.009 lux
Lens 2	1/2.8" CMOS, 12x optical zoom, f=6mm , FOV 50 x 28°, 2MP
IR Thermal imager	640*512, 19mm focus length, 12μm
AI Function	Human/Vehicle AI identification and tracking
Laser range	5~1500m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G

A30T-50

30x AI Object Tracking EO+IR Dual Sensor Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal imager	640*512, 50mm focus length, 12μm
AI Function	Human/Vehicle AI identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080p Micro HDMI / IP
Control method	UDP / PWM / PPM / UART / S.BUS / TCP
Local storage	SD card up to 256G
N.W.	1202g
Dimension	139.5*128*223.8mm

A30TR-50

30x EO+IR AI Object Tracking Target GPS Coordinate Resolving and LRF Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal imager	640*512, 50mm focus length, 12μm
AI Function	Human/Vehicle AI identification and tracking
Laser range	50~5000m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p Micro HDMI / IP
Control method	UDP / PWM / PPM / UART / S.BUS / TCP
Local storage	SD card up to 256G
N.W.	1355g
Dimension	145.8*138*227.8mm

CAMERA SERIES

A30TR-1575

30x EO+IR AI Object Tracking Target GPS Coordinate Resolving and LRF Gimbal Camera (5X IR)

Imager sensor	1/1.8 Type STARVIS CMOS
Lens	30x optical zoom, f=6.5~162.5mm
Total pixel	4.17MP
IR Thermal Imager	640*512, 15~75mm focus length, 5X optical zoom, 12μm, 25Hz
AI Function	Human/Vehicle AI Identification and tracking
Laser range	50~5000m
Object Tracking	✓
Working voltage	4S~6S
Output	IP
Control method	PWM / S.BUS / TTL / TCP / UDP
Local storage	SD card up to 256G
N.W.	2530g
Dimension	232*190*264.6mm

A40 Pro

40x EO AI Object Tracking Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	40x optical zoom, f=4.25~170mm
Total pixel	2.13MP
AI Function	Human/Vehicle AI Identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	905g
Dimension	118*134.5*188.4mm

A40TR Pro

40x EO+IR AI Object Tracking Target GPS Coordinate Resolving and LRF Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	40x optical zoom, f=4.25~170mm
Total pixel	2.13MP
IR Thermal Imager	640*512, 19mm focus length, 12μm
AI Function	Human/Vehicle AI Identification and tracking
Laser range	50~3000m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	905g
Dimension	126*134.2*210.4mm

A40T Pro

A40x EO+IR Dual Sensors AI Object Tracking Gimbal Cameras

Imager sensor	1/2.8" SONY CMOS
Lens	40x optical zoom, f=4.25~170mm
Total pixel	2.13MP
IR Thermal Imager	640*512, 19mm focus length, 12μm
AI Function	Human/Vehicle AI Identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	944g
Dimension	118*134.5*188.4mm

CAMERA SERIES

A40TR-35

40x EO+IR AI Object Tracking Target GPS Coordinate Resolving and LRF Gimbal Camera

Image sensor	1/2.8" SONY CMOS
Lens	40x optical zoom, f=4.25~170mm
Total pixel	2.13MP
IR Thermal image	640*512, 35mm focus length, 12μm
AI Function	Human/Vehicle AI identification and tracking
Laser range	50~3000m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	985g
Dimension	136*130*201.7mm

AT50

50mm Single Thermal AI Object Gimbal Camera

Lens	50mm focus length
Detector pixel	640*512
Pixel	12μm
AI Function	Human/Vehicle AI identification and tracking
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	PWM / PPM / UART / S.BUS / TCP / UDP
Local storage	SD card up to 256G
N.W.	717g
Dimension	134*100.8*155.6mm

Mini-Z10TIRM

Dual-sensor Object GPS Coordinate Resolving and LRF Gimbal Camera

Image sensor	1/3" CMOS
Lens	10x optical zoom, f=3.3~33mm
Total pixel	4.08MP
IR Thermal image	640*512, 24mm focus length, 12μm
Laser range	5~1800 meters
Object Tracking	✓
Working voltage	4S~8S
Output	1080p micro HDMI / IP
Control method	UART / PPM / TCP / S.BUS / PWM / UDP
Local storage	SD card up to 512G
N.W.	542g
Dimension	119.4*101.7*157.3mm

Q20KTIRM

20x EO 4K Triple Sensors Object GPS Coordinate Resolving and LRF Gimbal Camera

Image sensor	1/2.5 CMOS Sensor
Lens	20x optical zoom, f=4.4~88.4mm
Total pixel	8.51MP
IR Thermal image	640*512, 24mm focus length, 12μm, 50Hz
Laser range	50~3500m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP (4K/1080P)
Control method	PWM / S.BUS / TTL / TCP / UDP
Local storage	SD card up to 512G Take 4K photos; Video 4K (IP1080P)
N.W.	1153g
Dimension	156.6*132*188.7mm

CAMERA SERIES

Q30TIRM Pro

30x Object GPS Coordinate Resolving and LRF Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal imager	640*512, 35mm focus length, 25Hz, 12μm
Laser range	50~3000 meters
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP / SDI
Control method	UART / PWM / PPM / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	1013g
Dimension	130.0*186.1*191.3mm

Z30TIRM-1352

30x EO Dual IR Sensors Object GPS Coordinate Resolving and LRF Gimbal Camera

Imager sensor	1/2.8 STARVIS2 CMOS Sensor
Lens	30X optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal imager	640*512, 13 / 52mm focus length, 50Hz, 12μm
Laser range	5~1500m
Object Tracking	✓
Working voltage	4S~6S
Output	micro HDMI / IP
Control method	PWM / S.BUS / TTL / TCP / UDP
Local storage	SD card up to 512G
N.W.	1200g
Dimension	168.5*157.8*207.7mm

ZIR1352T

IR Thermal Dual-Sensor Object Tracking Gimbal Camera

IR Thermal imager_1	13mm focus length, 640*512, 25Hz, 12μm
IR Thermal imager_2	52mm focus length, 640*512, 25Hz, 12μm
Object Tracking	✓
Working voltage	4S~6S
Output	micro HDMI / IP
Control method	PWM / S.BUS / TTL / TCP / UDP
Local storage	SD card up to 512G
N.W.	803g
Dimension	127.5*127.4*138.9mm

Q20KTIR

20x 4K EO + IR Dual-sensorObject Tracking Gimbal Camera

Imager sensor	SONY 1/2.5" Exmor R" CMOS
Lens	20x optical zoom, f=4.4~88.4 mm
Total pixel	8.51MP
IR Thermal imager	640*512, 24mm focus length, 25Hz, 12μm
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP (4K/1080P)
Control method	PWM / S.BUS / TTL / TCP / UDP
Local storage	SD card up to 512G Take 4K photos; Video 4K (IP1080P)
N.W.	910g
Dimension	102.3*118.7*169.2mm

CAMERA SERIES

Q30TIR LITE

30x EO + IR Dual-Sensor Object Tracking Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal Imager	640*512, 24mm focus length, 25Hz, 12μm
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP / SDI
Control method	UART / PWM / PPM / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	868g
Dimension	111.6*129.8*179.3mm

Q30TIR-50

30x EO + IR Dual-Sensor Object Tracking Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal Imager	640*480, 50mm focus length, 25Hz, 12μm
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP / SDI
Control method	UART / PWM / PPM / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	1405g
Dimension	127.7*103*180.7mm

U30TIR

30x EO + IR Dual-Sensor Object Tracking Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal Imager	640*480, 24mm focus length, 25Hz, 12μm
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP / SDI
Control method	UART / PWM / PPM / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	991g
Dimension	127*122*187.4mm

Z30TE

30x Optical Zoom and Zoom LED Night Vision Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
Spotlight lighting range	300m
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP
Control method	UART / PWM / PPM / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	827g
Dimension	153.9*160.2*146.8mm

CAMERA SERIES

Q30T Pro

30x Optical Zoom Object Tracking Gimbal Camera

Image sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP / SDI
Control method	UART / PWM / PPM / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	811g
Dimention	104.9*128.2*172mm

U30T

30x Optical Zoom Object Tracking Gimbal Camera

Image sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
Object Tracking	✓
Working voltage	4S~6S
Output	1080p micro HDMI / IP / SDI
Control method	UART / PWM / PPM / S.BUS / UDP / TCP
Local storage	SD card up to 512G
N.W.	704g
Dimention	116.8*103.5*147.3mm

Q10F

10x Optical Zoom Gimbal Camera

Image sensor	1/3" CMOS
Lens	10x optical zoom, f=4.9~49mm
Total pixel	4MP
Working voltage	4S~6S
Output	1080p micro HDMI / AV
Control method	UART / PWM / PPM / S.BUS
Local storage	SD card up to 32G
N.W.	383g
Dimention	86.2*108*128.7mm

Q10N

10x Optical Zoom Gimbal Camera

Image sensor	1/2.8" CMOS
Lens	10x optical zoom, f=4.9~49mm
Total pixel	2MP
Working voltage	4S~6S
Output	IP
Control method	UART / PWM / PPM / S.BUS / TCP
Local storage	SD card up to 256G
N.W.	410g
Dimention	91.6*111.4*131.2mm

CAMERA SERIES

QIR50T Pro

HOT 1280

50mm High Resolution Thermal Object Tracking Gimbal Camera (1280*1024)

IR Thermal imager	50mm focus length
detector pixel	1280*1024
pixel	12μm
Object Tracking	✓
Working voltage	4S~6S
Output	IP / SDI
Control method	UART / PWM / PPM / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	940g
Dimension	112*136*173.3mm

U30TIRM-HD

HOT 1280

30x EO Triple Sensors 1280*1024 High Resolution Thermal 5KM LRF Object Tracking Gimbal Camera

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal imager	1280*1024, 60mm focus length, 12μm, 50Hz
Laser range	50~5000m
Object Tracking	✓
Working voltage	4S~6S
Output	IP / SDI
Control method	PWM / TTL / S.BUS / TCP / UDP
Local storage	SD card up to 512G
N.W.	1475g
Dimension	169*143.5*220.2mm

Q30TIR Pro

HOT 1280

30x EO/IR Dual Sensors high-definition Infrared Object Tracking Gimbal Camera (IR 1280*1024)

Imager sensor	1/2.8" SONY CMOS
Lens	30x optical zoom, f=4.3~129mm
Total pixel	2.13MP
IR Thermal imager	1280*1024, 50mm focus length, 25Hz, 12μm
Object Tracking	✓
Working voltage	4S~6S
Output	IP / SDI
Control method	PWM / PPM / UART / S.BUS / TCP
Local storage	SD card up to 512G
N.W.	1262g
Dimension	140.9*120*204.2mm

Q30TIRM-15100

HOT 1280

30x EO Triple Sensors 1280*1024 High Resolution Thermal 10KM LRF Object Tracking Gimbal Camera (7X IR)

Imager sensor	1/1.8 Type STARVIS CMOS
Lens	30x optical zoom, f=6.5~162.5mm
Total pixel	4.17MP
IR Thermal imager	1280*1024, 16~100mm focus length, 7X optical zoom, 12μm, 25Hz
Laser range	50~10000m
Object Tracking	✓
Working voltage	4S~6S
Output	IP / SDI
Control method	PWM / S.BUS / TTL / TCP / UDP
Local storage	SD card up to 512G
N.W.	5120g
Dimension	200.7*230*317.6mm

CAMERA SERIES

DESERT SENTINEL
systems security

	CAM01A	CAM02A	CAM03A	CAM01TA
Image Sensor	1/3" Inch CMOS Sensor	1/1.8" Inch sensor	1/2.8" Inch Starlight Sensor	Thermal
Horizontal Resolution	1200TV	1200TV	1200TV	384x288@12μm
Lens	2.1mm / F2.4	2.1mm / F2.4	2.1mm / F2.4	F1.0/9.1mm/48°(H)34°(V)59°(D)
FOV	165°	165°	130°(4:3) 165°(16:9)	/
Wide Voltage Input	DC 5-25V	DC 5-36V	DC 5-36V	DC 5-20V
Thermal Sensitivity	/	/	/	←40mk @ F1 25°C
Frame Rate	PAL:50fps; NTSC:60fps	PAL:50fps; NTSC:60fps	PAL:50fps; NTSC:60fps	25/50fps
Analog Interface	CVBS	CVBS	CVBS	CVBS
HD Interface	/	/	/	MIP-CSI/Walksnail Avatar
Latency	<20ms	<20ms	<20ms	20ms
Size	19*19mm	19*19mm	19*19*20mm	22*26.3mm

CAMERA SERIES

DESERT SENTINEL
systems security

	CAM01A	CAM02A	CAM03A	CAM01TA
Image Sensor	1/3" Inch CMOS Sensor	1/1.8" Inch sensor	1/2.8" Inch Starlight Sensor	Thermal
Horizontal Resolution	1200TV	1200TV	1200TV	384x288@12μm
Lens	2.1mm / F2.4	2.1mm / F2.4	2.1mm / F2.4	F1.0/9.1mm/48°(H)34°(V)59°(D)
FOV	165°	165°	130°(4:3) 165°(16:9)	/
Wide Voltage Input	DC 5-25V	DC 5-36V	DC 5-36V	DC 5-20V
Thermal Sensitivity	/	/	/	←40mk @ F1 25°C
Frame Rate	PAL:50fps; NTSC:60fps	PAL:50fps; NTSC:60fps	PAL:50fps; NTSC:60fps	25/50fps
Analog Interface	CVBS	CVBS	CVBS	CVBS
HD Interface	/	/	/	MIP-CSI/Walksnail Avatar
Latency	<20ms	<20ms	<20ms	20ms
Size	19*19mm	19*19mm	19*19*20mm	22*26.3mm

DESERT SENTINEL
systems security

CAMERA SERIES

DRAGON M7 / DRAGON V30S / DRAGON V30 LITE

Equipped with a 42 million HD orthophoto camera, it can take HD orthophoto images of target at a high altitude to quickly create centimeter-level maps for battlefield command and analyze targets in the middle and late stages

Designed for daytime scenes, it has high-definition picture backhaul, 360° free rotation of the course, lock the target, and screen tracking.

Designed for daytime scenes, it has high-definition picture backhaul, 360° free rotation of the course, lock the target, and screen tracking.

DESERT SENTINEL
systems security

CAMERA SERIES

DRAGON VT30 / DRAGON T50R / DRAGON VT1 / DRAGON V360RL

The Dragon VT30 EO + IR pod integrates visible light and thermal functions with day and night combat capabilities.

Dragon T50R IR+lidar pod can use drone to measure precise, meter-level distance of the target, and can be operated day and night.

Integrated light, infrared and lidar ranging, with day and night combat capabilities, can measure the precise distance of the target position through the UAV, providing meter-level target positioning.

The Dragon VT360RL pod integrates visible light, thermal imaging and lidar distance measurement and can use drone to measure precise meter-level target positioning wth day and night combat capabilities.

Product category

STACK SERIES

DESERT SENTINEL
systems security

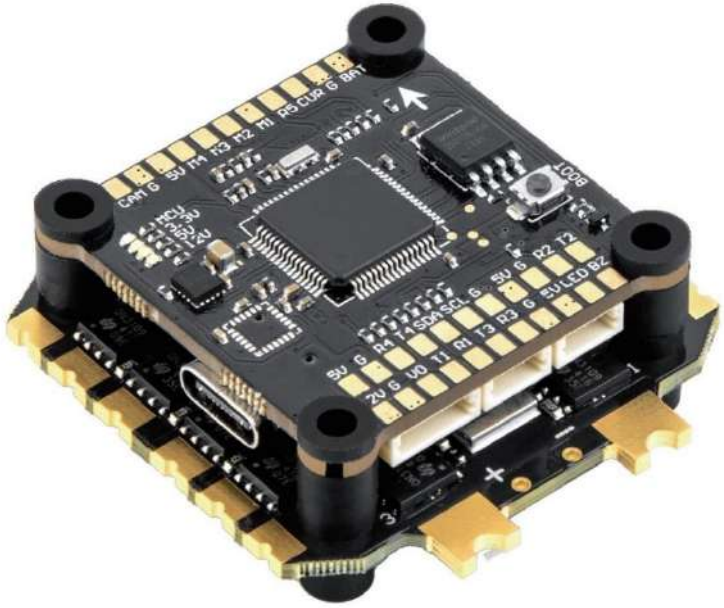
STACK SERIES

FT-405-55A

The FT405-55A is a high-performance flight controller designed for demanding UAV applications. Equipped with an STM32F405 MCU and ICM42688 or optional MPU6000 IMU, it ensures precise control and responsiveness. The compact design includes robust serial support, adjustable BEC outputs, and compatibility with 3S–6S lithium batteries. Ideal for high-speed drones and multi-rotor platforms.

KEY SPECIFICATIONS:

— MCU: STM32F405I
— MU: ICM42688 (default) / MPU6000 (optional)
— BEC Output: 5V max 3A, 12V max 2.5A
— Serial Ports: 5
— Continuous Current: 55A × 4
— Dimensions: 44.5 × 43 × 16 mm
— Weight: 24.6 g
— Input Voltage: 3S–6S Li-ion battery
— Mounting Hole Distance: 30.5 × 30.5 mm



DESERT SENTINEL
systems security

Product category

FC SERIES

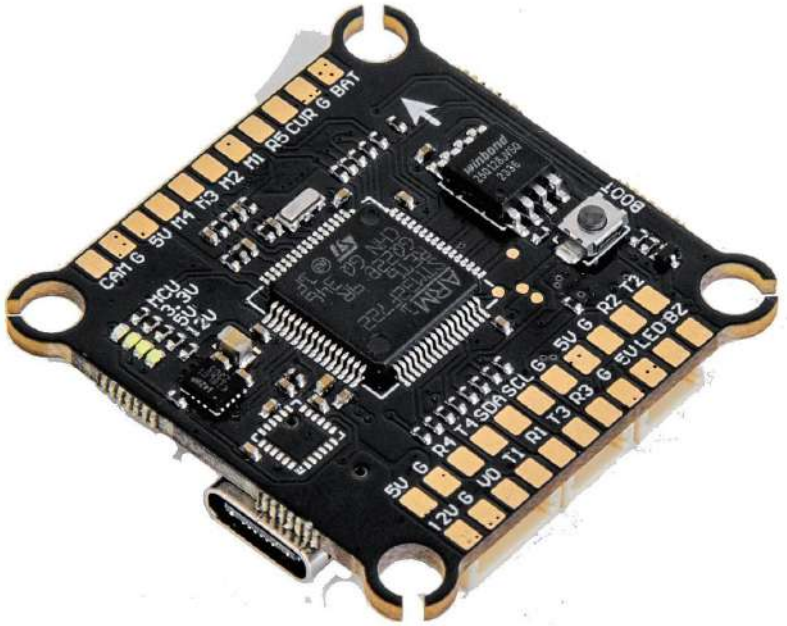
DESERT SENTINEL
systems security

FC SERIES

FC405A

The FC405A is a compact and lightweight flight controller designed for high-performance UAV platforms. Built with the STM32F405 microcontroller and featuring an ICM42688P or optional MPU6000 IMU, it offers reliable stability and fast signal processing. Ideal for a wide range of UAV applications, it supports advanced power input and multiple BEC outputs.

KEY SPECIFICATIONS:
— MCU: STM32F405
— IMU (Gyro): ICM42688P (default) / MPU6000 (optional)
— Power Input: 3S–8S lithium battery
— BEC Output: 5V max 3A, 12V max 2.5A
— Mounting Hole Distance: 30.5 × 30.5 mm
— Weight: 7 g



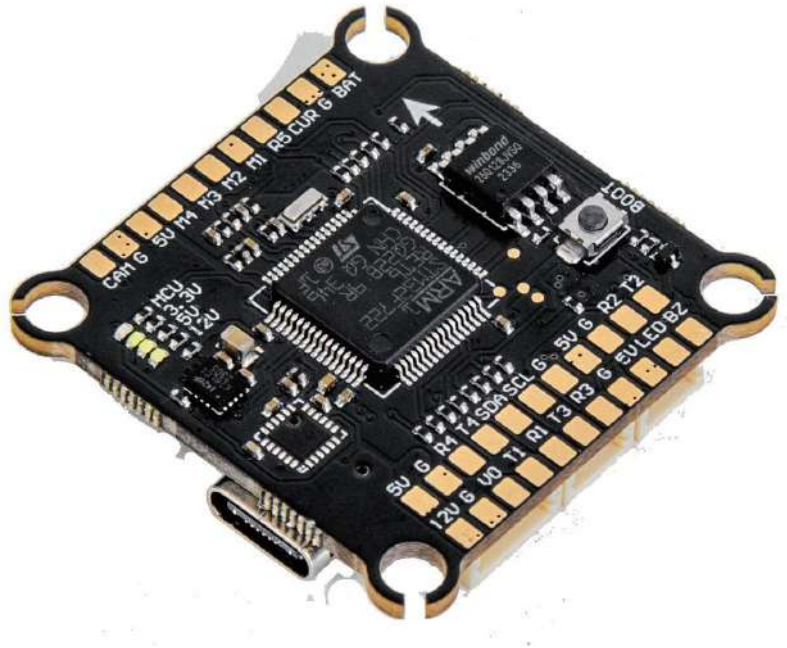
DESERT SENTINEL
systems security

FC SERIES

FC722A

The FC722A flight controller is an advanced control solution for professional UAV platforms. Built around the high-performance STM32F722 microcontroller, it features a dual IMU configuration with ICM42688P as standard and MPU6000 as an option. Its compact design and robust capabilities make it ideal for demanding flight applications.

KEY SPECIFICATIONS:
— MCU: STM32F722
— IMU (Gyro): ICM42688P (default) / MPU6000 (optional)
— Power Input: 3S–8S lithium battery
— BEC Output: 5V max 3A, 12V max 2.5A
— Mounting Hole Distance: 30.5 × 30.5 mm
— Weight: 7 g



DESERT SENTINEL
systems security

Product category

ESC SERIES

ESC SERIES

ESC55FA

3S-6S lithium battery

55A*4 Continuous current

Specifications

Peak Current	65A (10s)
ESC Protocol	DSHOT300/600
Mounting Hole Distance	30.5x30.5mm

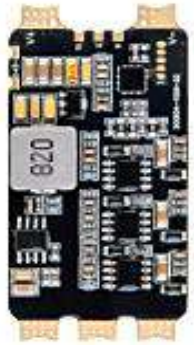
ESC65FA

3S-8S lithium battery

65A*4 Continuous current

Specifications

Peak Current	75A (10s)
ESC Protocol	DSHOT300/600
Mounting Hole Distance	30.5x30.5mm



ESC70SA

Specifications

Input Voltage	3S-6S lithium battery
Continuous current	70A
Peak Current	80A (10s)
ESC Protocol	DSHOT300/600

ESC80SA

Specifications

Input Voltage	3S-8S lithium battery
Continuous current	80A
Peak Current	90A (10s)
ESC Protocol	DSHOT300/600

DESERT SENTINEL
systems security

Product category

VTX SERIES

DESERT SENTINEL
systems security

VTX SERIES

VTX583A / VTX122A / VTX334A

The VTX series modules are high-performance video transmission units designed for FPV and UAV systems. They offer multiple power levels and wide frequency ranges, enabling reliable long-distance communication. Each model supports customization to meet specific application requirements, with compact dimensions and robust construction.

KEY SPECIFICATIONS:

— Transmit Power: 25MW/400MW/800MW/1.5W/2.5W/0MW
— Default Output: 5733MHz / 2.5W
— Input Voltage: DC 7–26V
— Frequency Range: 5645–5945MHz
— Hole Distance: 30.5×30.5mm
— Dimensions: 36×36×9.5mm

DESERT SENTINEL
systems security

Product category

ANT SERIES

ANT SERIES

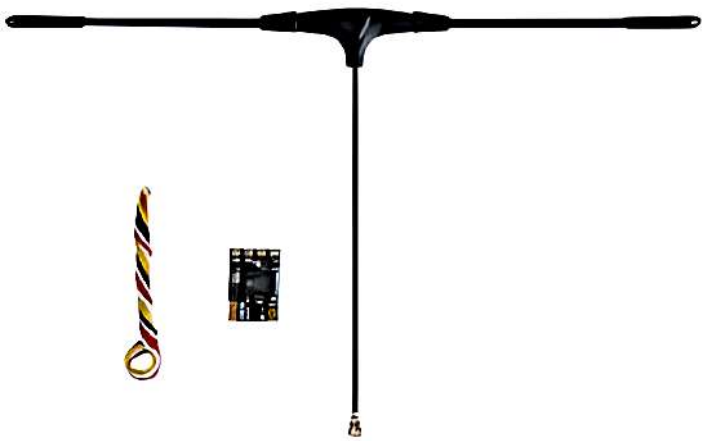
	ANT12A	ANT33A	ANT58A
Frequency Bands	1.2GHz	3.3GHz	5.8GHz
Frequency range	1100-1300MHz	3290-3430MHz	5645-5945MHz
Rotary Polarization	RHCP	RHCP	RHCP
Gain	5dB	5dB	5dB
VSWR	<1.3	<1.8	<1.8
Antenna Interface	SMA	SMA	SMA
Vertical plane half power angle	80°	80°	80°
Axial Ratio	<2dB	<2dB	<2dB

DESERT SENTINEL
systems security

Product category

RECEIRVER SERIES

RECEIRVER SERIES



REC915A

Specifications

Frequency range	915MHz
Input Port Protocol	CRSF
Maximum Receive Refresh Rate	200Hz
Minimum receive refresh rate	25Hz
Operating Voltage	DC 5V
Dimension	11mm*17mm*4mm

REC24A

Specifications

Frequency range	2.4GHz
Input Port Protocol	CRSF
Maximum Receive Refresh Rate	500Hz
Minimum receive refresh rate	25Hz
Operating Voltage	DC 5V
Dimension	17mm*10.5mm*3mm

DESERT SENTINEL
systems security

Product category

MOTOR SERIES

DESERT SENTINEL
systems security

MOTOR SERIES

MT2807A / MT3214A / MT4218A

Specification	MT2807A-1300KV	MT3214A-900KV	MT4218A-330KV
Maximum Power	1100w	1930w	2898.9w
Maximum Current	46A	80A	75.56A
KV Value	1300KV	900KV	330KV
Resistance	0.059Ω	0.023Ω	0.058Ω
Number of Poles	14	14	14
Installation Size	M3 19*19mm	M3 19*19mm	M4 30*30mm
Recommended Blade	PH7040-3	PH1050-3	PH1309-3
Motor Size	⌀ 33.1*33.4mm	⌀ 39*49.5mm	⌀ 50.4*64.5mm
Stator Size	⌀ 28*7mm	⌀ 32.5*14mm	⌀ 42*18mm

DESERT SENTINEL
systems security

Product category

TACTICAL DRONE

DESERT SENTINEL
systems security

TACTICAL DRONE

LOONG 1E

LOONG 1E is a VTOL fixed wing drone for individual combat featuring long flight time, easy use, and rapid deployment. It supports various payloads such as EO camera payload, EO+IR camera payload, HD camera payload for medium and long-distance war situation reconnaissance, searching targets, and high-precision locating.

2KG Payload
170MIN Endurance
2.4M VTOL Fixed Wing Drone

DESERT SENTINEL
systems security

TACTICAL DRONE

LOONG 1 / LOONG 2

LOONG 1 is a single-combat VTOL fixed-wing drone featuring long flight time, easy use, and rapid deployment. It supports various payloads such as EO camera payload, EO+IR camera payload, EO+IR+laser payload as well as HD camera payload for medium and long-distance war situation reconnaissance, searching targets, and high-precision locating.

LOONG 2 is a multicopter drone with a maximum payload of 2 kg and a maximum endurance of 45 minutes. The airframe components are modular and can be quickly deployed in less than 1 minute. High load and excellent endurance, removable landing gear and foldable arms, and universal plug-and-play standardized interfaces.

DESERT SENTINEL
systems security

TACTICAL DRONE

LOONG 3 / LOONG 4

LOONG 3 is a small surveillance drone, which can be used for reconnaissance, patrol, precision strike and other purposes. It has a long flight time, heavy payload capacity without need for flight runway. It is used as an unmanned tool for one unit penetration attack in war

LOONG 4 is a medium-sized multi rotor drone with heavy load and long flight time.
The maximum load is 10kg, supporting RTK high-precision positioning system.

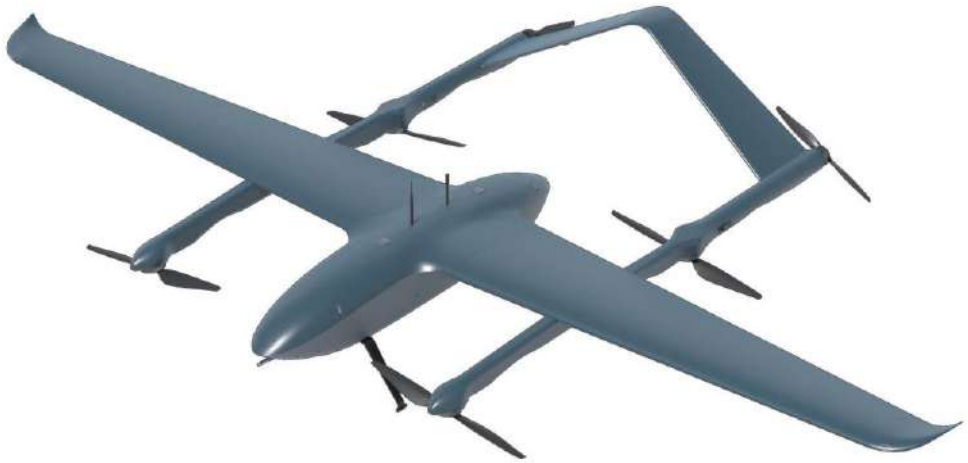
DESERT SENTINEL
systems security

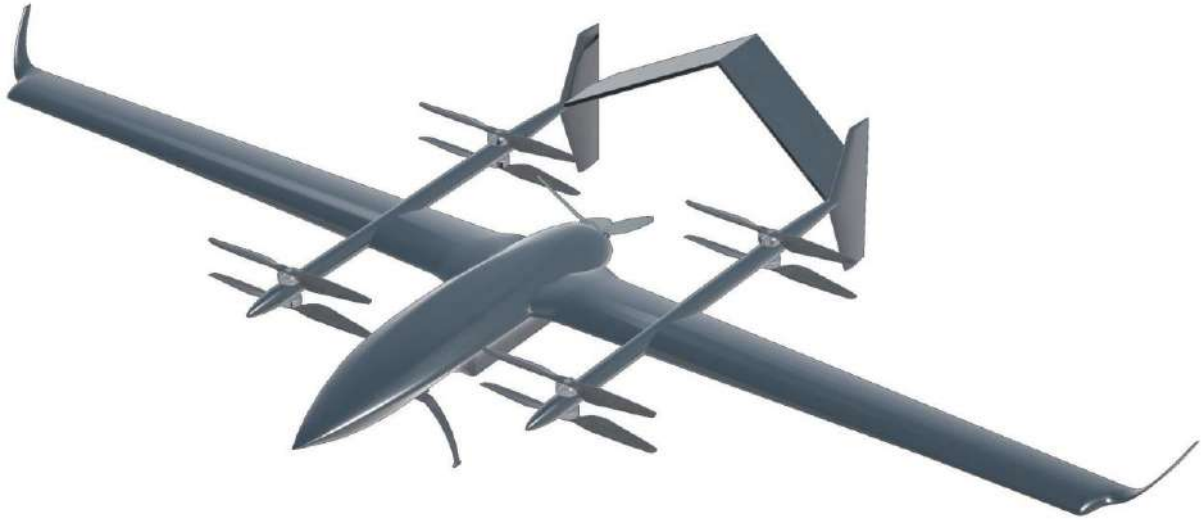
TACTICAL DRONE

LOONG 5 / LOONG 7

LOONG 5 is a medium and large unmanned bomber, with the characteristics of large bomb load and flight time. With a maximum load of 20kg and a flight time of up to 240 minutes, it adopts a double-tail brace layout, and the cruising flight uses 2 independent power systems and dual power backup.

LOONG 7 is a large VTOL fixed wing drone with characteristics of heavy payload, long flight time and fast flight speed. The Max. payload up to 50kg, flight time of 360 minutes, and Max. speed 126km/h.





DESERT SENTINEL
systems security

TACTICAL DRONE

LOONG 8 / LOONG 10

LOONG 8 is a large-capacity four-rotor drone with a snap-on locking structure for easy operation; and with a Z-shaped folding structure for flexible transport.

LOONG 10 is a heavy-duty four-axis eight-rotor drone, with high-strength carbon fiber integrated molded body, electric folding tripod, foldable storage part, pluggable battery, and quick-detachable payload connector.

DESERT SENTINEL
systems security

Product category

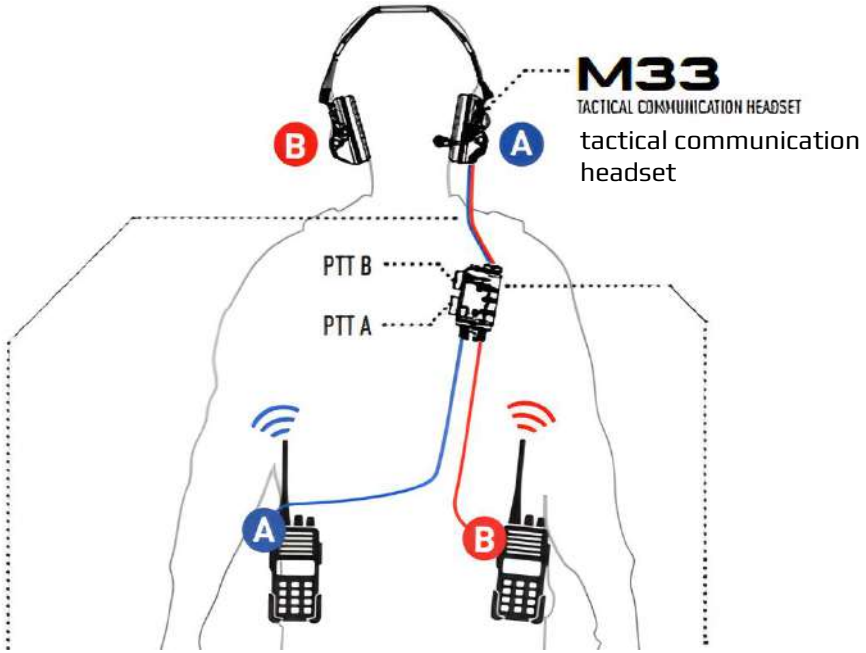
MILPRO SERIES

DESERT SENTINEL
systems security

MILPRO SERIES

M31 / M32 / M33 / M56

M31/M32/M33 Mark4 is an electronic noise-canceling headset designed for special operations. It enhances subtle environmental sounds, tracks and optimizes human voices, while blocking out hazardous noise above 82dB (such as explosions and gunfire). This not only protects hearing but also improves conversation clarity and situational awareness. The upgraded modular design allows for the flexible exchange of different suspension systems, making it adaptable to various wearing styles (H Series, X Series, N Series)



M56

dual-comm push-to-talk

M31 MARK4

milpro-tactical electronic noise canceling headset

M32 MARK4

milpro-tactical communication hearing protection headset

DESERT SENTINEL
systems security

Product category

LAW ENFORCEMENT SERIES

LAW ENFORCEMENT SERIES

P20/P21

P20/P21 Invisible Communication Earpiece is specifically designed for high-intensity missions, meeting the practical needs of professional fields such as military, police anti-riot operations, security protection, andemergencycommunications for firefighting. It is compatible with a wide range of radio models and offers single or dual-ear options. The quick-detach handheld PTT (Push-To-Talk) or finger-ring PTT ensures convenient operation.

Featuring an armature coil speaker with an in-ear design, it delivers high sound pressure output while the in-ear earplugs isolate noise, ensuring secure communication. Comfortable and durable, it combines the flexibility of TPU with the lightweight nature of titanium alloy, making it suitable for prolonged use in various environments

DESERT SENTINEL
systems security

Product category

SHOOTING SPORTS & TRAINING

DESERT SENTINEL
systems security

SHOOTING SPORTS & TRAINING

M31 PLUS /M32 PLUS / M20

M31 PLUS/M32 PLUS is a digital noise-canceling headset designed to protect hearing in daily shooting training. They suppress high noise levels while enhancing environmental sounds to improve awareness of voice , movements, and gunfire. M20 in-ear electronic earplugs is designed to provide continuous protection against both continuous and impulse noise, blocking hazardous noise levels above 85 dB while enhancing situational awareness and communication in challenging environments

DESERT SENTINEL
systems security

SHOOTING SPORTS & TRAINING

M300T / M200T / M300A / M300L

M300A/T utilizes advanced sound amplification and noise reduction technology to effectively minimize the impact of gunshots on hearing.

M300T
BLUETOOTH ELECTRONIC HEARING PROTECTOR

M300A
ELECTRONIC HEARING PROTECTOR

M200T
IN-EAR NOISE-CANCELING HEADSET

M200T is an in-ear noise-canceling headset designed for both outdoor and indoor shooting ranges, offering hearing protection and clear communication.

M300L is a physical noise reduction earmuff designed for daily training.

M300L
HEARING PROTECTION EARMUFF

DESERT SENTINEL
systems security

SHOOTING SPORTS & TRAINING

M01/02 / M03/04 / C06 / C07

Molded with super low-pressure, slow release comfort foam.

M01/02 NRR 33
MAXDEFENSE EAR PLUGS

Washable triple-flange design for snug, comfortable fit.

M03/04 NRR 23
MAXDEFENSE SILICONE EAR PLUGS

C06 is designed to provide hearing protection in high-noise environments, using impact-resistant plastics to meet a wide range of industrial application needs.

C06 NRR 26
EARMUFFS

C07 NRR 29
EARMUFFS

C07 is designed to provide hearing protection in high-noise environments, using impact-resistant plastics to meet a wide range of industrial application needs.

DESERT SENTINEL
systems security

Product category

ACCESSORIES

ACCESSORIES

S08 / S10 / S10D / S16A / S18 / S20 / S31

S10

CANTILEVER ELECTRET MICROPHONE

Compatible with [illegible]

S10D

CANTILEVER MOVING-COIL MICROPHONE

Compatible with [illegible]

S31

CANTILEVER ELECTRET FLEXIBLE MICROPHONE

Compatible with [illegible]

S08

HEADSET HANGING BUCKLE

Allows the headset to be hung on a belt or Molle webbing when not in use.

S16A

The S16A is a portable hard-shell crush-proof headset carrying case with a waterproof exterior. Ensures your headphones stay safe in any environment.

S18

MULTIFUNCTIONAL TACTICAL BAG

1000D Military Grade Polyster molle system YKK Zipper. Sling strap bag and handle for carrying. Adjustable opening angle up to 180 degrees. Multiple separation on the inside.

COLORS

- Tactical Black
- Urban Gray
- Olive Green
- Tan

S20

BONE CONDUCTION MICROPHONE

Compatible with M32/M32H/M32/M32H

- High noise resistance
- High reliability
- Secure fit

ACCESSORIES

M16A / M61 / M62

M16A
RAIL MOUNT KIT

Rear-flip headset stand compatible with ARC helmet rails, designed for the Mark4 / PLUS series. It features a flip-forward and flip-backward design with four adjustable joints to fit different head shapes. Optimized for night-vision goggles, it increases side rail space with a robust and lightweight design.

COLORS:

- Coyote Brown
- Foliage Green
- Tactical Black

M16A

Compatible with ARC military helmet rails, featuring 4 adjustable joints to fit different head shapes, enhancing side rail space.w

M16A-TW

Compatible with EXFIL® 3.0 military helmet rails, featuring 4 adjustable joints to fit different head shapes, enhancing side rail space.

M16A-M-LOK

Compatible with M-LOK military helmet rails, featuring 4 adjustable joints to fit different head shapes, enhancing side rail space.

M61
MODULAR HEADBAND

Made of 600D nylon, the D-ring design of the headband and the MOLLE system make it easy to hang headsets. Universal application, compatible with most headsets on the market.

Genuine Multicam Alpine | Starry green | Starry desert

Genuine Multicam | Genuine Multicam Black | Genuine Multicam Tropic

Cadet Grey | Foliage Green | Tactical Black | Coyote Tan

M62
VELCRO HEADBAND

One-piece cutting, easy to replace and paste accessories, compatible with most headsets on the market.

DESERT SENTINEL
systems security

ACCESSORIES

M51 / M52 / M55 / M56

M51

Military Adapter PTT for M32 TP-120 Connector (NATO STD). Button activated PTT (push to talk) unit, can be clipped on clothing or belts.

M52

Military Adapter PTT for M32 TP-120 Connector (NATO STD). Fits military standard plugs, comes with M50 finger push button.

M56

Mirror image design, adaptable to left/right-handed operations. Adjustable wearing angle. Unique button design for blind recognition. Types of plugs customized.

M55

Round Plate Design.
One-button Operation.
360° rotatable belt clip with lanyard loop

DESERT SENTINEL
systems security

Product category

TACTICAL SOLUTIONS

DESERT SENTINEL
systems security

TACTICAL SOLUTIONS

V366L / M500 / FTB675L

V366L Sniper Detector

- Day and night dual-lens system with 6-hour continuous monitoring
- 16–32× optical zoom, 1/3" CCD low-light color/black camera
- Laser rangefinder: 2 km standard (optional 6 km / 10 km)
- Accurate GPS + Beidou positioning, e-compass

V366L

M500 Smart Thermal Imaging Scope

- High-resolution imaging: 384×288 and 640×512 infrared detectors
- Lightweight and compact with quick-detach Picatinny mount
- Extremely low power consumption for extended operations
- Optimized for night missions

M500

FTB675L Multi-function Thermal Imaging Locator

- Thermal Resolution: 640×512
- Lens Size: 75mm | Pixel Pitch: 12μm | Frame Rate: 50Hz
- Laser Rangefinder: Up to 6km | Laser Wavelength: 1535nm

FTB675L

DESERT SENTINEL
systems security

TACTICAL SOLUTIONS

LTC6535 / NTG8000CZ / T75C / L1536

LTC6535

Thermal Fusion Binocular & Locator – LTC6535
Compact and rugged multi-sensor thermal binocular with GPS, DMC, and long-range laser rangefinder.

NTG8000CZ

Multi-Function Cooled Thermal Binocular – NTG8000CZ
Advanced binocular for long-range recon and geolocation with 36× zoom, IR sensor, GPS, DMC, laser rangefinder/pointer, HD camera, and support for remote control and video/data export.

T75C

T75C – Cooled Thermal Sight
Advanced cooled thermal imaging sight with 640×512 HgCdTe sensor and 15µm pixel pitch. Offers dual focal lengths (85mm/150mm), 6.5°–2.7° FOV, and 1–8× zoom.

L1536

L1536 Long Distance Laser Rangefinder & Target Locator
The L1536 is a multifunctional optical system equipped with a high-resolution CMOS camera, long-range laser rangefinder, and advanced positioning capabilities.

DESERT SENTINEL
systems security

Product category

HELMET MOUNTED

DESERT SENTINEL
systems security

HELMET MOUNTED

FBNVG8 / G14C / TILO-3C / PVS31MG

HELMET MOUNTED NIGHT VISION SYSTEMS

These advanced helmet-mounted night vision devices offer exceptional clarity and versatility for tactical operations in low-light and no-light environments. Compact, rugged, and lightweight, they support extended missions and ensure hands-free situational awareness.

Key features include:
— High-resolution image intensification
— Thermal and digital fusion options (model dependent)
— Lightweight tactical helmet integration
— Long battery life and intuitive operation
— Suitable for military, law enforcement, and reconnaissance missions

FBNVG8

G14C

TILO-3C

PVS31MG

HELMET MOUNTED

PVS31C / GPNVG18C / YSG / NVM2229

HELMET MOUNTED NIGHT VISION SYSTEMS

These state-of-the-art helmet-mounted night vision systems offer enhanced optical clarity, durability, and mission-ready features. Designed for tactical efficiency in low-light operations, they ensure high-performance visibility while allowing hands-free mobility.

PVS31C

GPNVG18C

YSG

NVM2229

Key features include:

— Binocular and panoramic designs for superior situational awareness
— High-resolution image intensifiers and ergonomic construction
— Lightweight and rugged build for extended missions
—Easy helmet integration with various mounting optionsIdeal for military, tactical, and special operations use

DESERT SENTINEL
systems security

HELMET MOUNTED

2230M / NVM2229L

HELMET MOUNTED NIGHT VISION SYSTEMS

2230M is a low-light multi functional night vision monocular, Head or helmet mounted, it allowed the user to retain their night adapted vision in one eye while viewing their surroundings through the illuminated eyepiece of the PVS- . The new battery housing completes the perfect package by allowing the user to power off the unit when in an upright position and power on when flipped down.

NVM2229L multifunctional light-weight individual soldier helmet night
vision device is a new product developed based on the latest photoelectric technology. The instrument uses a high-performance second-generation/third-generation image intensifier, with a nylon light-weight shell, excellent performance, small size, and strong ,The image is clear, the operation is simple, and the cost performance is high.

2230M

NVM2229L

Product category

ROBOT

DESERT SENTINEL
systems security

ROBOT

CRAWLER - TYPE INTELLIGENT ROBOT

The crawler - type robot pan - tilt independently developed by Beiyu can replace personnel to carry out tasks in complex terrains or high - risk areas. It can also serve as a surveillance and attack platform, mainly used in scenarios such as counter - terrorism and reconnaissance.

Functional Features
— Crawler - type traveling mechanism: It is controlled by dual motors with speed closed - loop control, ensuring stable movement. It shows excellent performance in driving straight and turning, and can adapt to complex terrains.
— Parking control on slopes: It has a parking control function on slopes to prevent the vehicle from rolling down.

— Unique suspension design: The unique suspension design reduces the inclination amplitude.
— High - definition digital wireless image transmission system: It enables remote real - time video monitoring.

DESERT
SENTINEL
systems security

Product category

RECONNAISSANCE AND EXPLORATION

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

SIX-WHEEL DRIVE OFF-ROAD UNMANNED INSPECTION VEHICLE

Features and Advantages:
Ultra-long 24-hour stand-by: Capable of uninterrupted patrol, reconnaissance, and key position monitoring.
Real-time data transmission: Supports systematic border management and visual mapping.

Key Specifications:
— Driving Method: Six-wheel drive
— Axle Weight: 1000 kg
— Max Speed: ≤40 km/h
— Climbing Angle: 30°
— Suspension: Independent
— Control: High-precision unmanned driving and platform management

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU EXPLORER 002 - UNMANNED PATROL ROBOT

Features and Advantages:
Equipped with multi-function detection, including target recognition and identification of flammable or explosive substances.
Versatile deployment: Ideal for patrol missions in factories, parks, and similar environments, significantly improving operational efficiency.

Key Specifications:
— Max Travel Speed: ≤15 km/h
— Endurance Range: 15 km
— Control Method: High-precision LIDAR-based unmanned driving, supporting remote control and integrated platform operation

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU EXPLORER 003 - WHEELED EXPLOSION-PROOF PATROL ROBOT

Features and Advantages:
Path planning with IMU + LIDAR + RTK
Video analytics for early danger reporting and fire risk alerts

Key Specifications:
— Driving: Four-wheel independent
— Speed: 20 km/h
— Climbing Angle: 25°
— Endurance: 8 km
— Protection: Exd IIB T4 Gb
— Control: LIDAR unmanned driving, remote image transmission

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU EXPLORER 004 – ALL-TERRAIN FOUR-WHEEL DRIVE UNMANNED VEHICLE

Features and Advantages:
Automatic Identification: Uses AI dual-spectrum detection for battlefield intelligence gathering and threat marking at distances up to 800 meters.
Psychological Warfare: Capable of remote voice broadcast for enemy surrender or political messaging.
Rugged Design: Strong grip and terrain adaptability for stable off-road mobility and reliable performance.

Key Specifications:
— Driving Method: 4WD
— Vehicle Weight: 1000 kg
— Battery Output Power: ≥3 kW
— Travel Speed: ≤50 km/hEndurance: ≥160 km cruising range
— Control Mode: Beidou RTK high-precision navigation, remote/manual control

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU EXPLORER 005 - BYZCC03 UNMANNED RECONNAISSANCE VEHICLE

Features and Advantages:
Remote control: Operated via a 2 km-range image remote with support for 4-channel HD video transmission, real-time voice communication, and remote pickup.
Autonomous navigation: Beidou RTK-enabled navigation supports route planning and maintains course even with signal loss.
High terrain adaptability: Ackermann steering system allows stable mobility over mud, cobblestone, concrete, and desert roads.

Key Specifications:
— Driving Method: Switchable two-wheel drive
— Max Travel Speed: ≤30 km/h
— Suspension Type: Trailing arm suspension
— Steering Type: Ackermann steering
— Remote Control Range: 2 km
— Control Modes: Manual operation, wireless image transmission, and autonomous driving

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XINGSHI 001 - HUMMER-LIKE UNMANNED TARGET VEHICLE

Simulates the appearance and mobility characteristics of a Hummer vehicle.

Features and Advantages:
Fast mode switching: Manual, autonomous tracking, and platform control in just 3 seconds
Real-time data: Remote vehicle control and video feedback with storage and live updates
Stable and durable chassis for rugged terrain

Key Specifications:
— Payload: ≥500kg
— Drive Mode: Ackermann two-wheel drive
— Speed: ≤60KM/h
— Tracking Accuracy: 50cm
— Min Lateral Distance: 10m
— Min Longitudinal Distance: 50m
— Max Group Size: 32 units
— Control Modes: Remote, manual, autonomous

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XINGSHI 002 - HAIMASI-LIKE UNMANNED TARGET VEHICLE

Designed to replicate a Haimasi tactical vehicle, suitable for harsh environments such as islands and Gobi desert areas.

Features and Advantages:
Fully autonomous navigation with Beidou satellite and visual recognition
Advanced obstacle avoidance and preset route planning
Endurance exceeds 3 hours; range >10KM

Key Specifications:
— Payload: ≥600kg
— Speed: ≤30KM/h
— Tracking Accuracy: 50cm
— Endurance Time: ≥3h
— Drive Mode: Beidou + visual area detection (autonomous)

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XIAOYING 001 - PRACTICAL DUAL-SWITCH TARGET VEHICLE

A durable and highly responsive target vehicle used for realistic combat training, supporting dual control modes for flexible mission adaptation.

Features and Advantages:
Excellent road stability with reinforced sheet metal construction
Rapid switching between manual driving, autonomous tracking, and remote control
Smart obstacle avoidance and real-time transmission using CAN2.0 interface

Key Specifications:
— Dimensions (L × W): 3500mm × 2000mm
— Max Speed: ≤20KM/h
— Max Load: 2 tons

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XIAOYING 002 - PICKUP-LIKE UNMANNED TARGET VEHICLE

A tactical unmanned target designed to simulate the visual and motion behavior of standard military pickups in field training environments.

Features and Advantages:
Rapid transition between driving modes
Live transmission of road and vehicle status
GPS-based positioning with <50cm accuracy
Long-distance communication range up to 20KM

Key Specifications:
— Payload: ≥2000kg
— Max Speed: ≤60KM/h
— Max Load Capacity: 2 tons
— Control Modes: Autonomous, manual, remote
— Positioning Accuracy: <50cm

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XIAOYING 003 - IRON SHELL TARGET VEHICLE

A compact and armored unmanned target platform designed for tactical drills and high-durability applications.

Features and Advantages:
Strong frame powered by a 6.5KW motor
Endurance range of up to 50KM
Supports remote control or platform control modes
Quick system response: <100ms

Key Specifications:
— Motor Power: 6.5KW
— Max Speed: ≤60KM/h
— Endurance Range: 50KM
— Response Time: <100ms
— Remote Control Distance: 5KM

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XIAOYING 004 - IMITATION HONGSHEN OIL-POWERED UNMANNED TARGET VEHICLE

Features and Advantages:
Meets live-fire shooting requirements with stable laser scattering capability.
Designed for high-altitude and gravel terrains with strong road adaptability.
Automatic tracking and route control ensure smooth travel on planned paths.
Transmits real-time driving data and position to the ground station.

Key Specifications:
— Driving Method: Wheeled drive
— Endurance Range: 300KM
— Travel Speed: ≥80KM/h
— Tracking Accuracy: 1 meter
— Climbing Angle: 30°
— Wind Resistance: ≥14 m/s

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XIAOYING 005 - IMITATION BMP-2 ARMORED UNMANNED TARGET VEHICLE

Features and Advantages:
Simulates the BMP-2 armored vehicle, meeting live-fire training needs.
Equipped with real-time tracking and route feedback system.
Stable movement on gravel, sand, and mud with integrated control.

Key Specifications:
— Driving Method: Wheeled drive
— Endurance Range: 300KM
— Travel Speed: ≥80KM/h
— Tracking Accuracy: 1 meter
— Climbing Angle: 30°
— Wind Resistance: ≥14 m/s

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XIAOYING 006 - LIGHTWEIGHT MOBILE TRAINING UNMANNED TARGET VEHICLE

Features and Advantages:
Excellent for rough terrain with 20cm obstacle clearance.
Long battery life with upgraded lithium battery.
Easy to use and maintain, supports remote and autonomous modes.

Key Specifications:
— Vehicle Size (L×W×H): 1030mm × 1050mm × 740mm
— Load Capacity: 150KG
— Operating Temperature: -30°C to 50°C

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU LANGYA 001 - RECONNAISSANCE DEMINING ROBOT

Features and Advantages:
Ideal for reconnaissance and disposal of explosive devices.
Modular, waterproof, dustproof structure.
Climbs stairs/slopes up to 30°.
Transmits HD video remotely via wireless communication.

Key Specifications:
— Travel Speed: 0–5KM/h
— Endurance: 4H/16H
— Protection Level: IP65
— Obstacle Height: 300mm
— Mechanical Arm Degrees of Freedom: 6
— Max Gripping Weight: 30KG (extended), 60KG (retracted)
— Control: Wireless ≥2KM / Wired ≥100M

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU LANGYA 002 - DEMINING ROBOT

Features and Advantages:
Multi-functional robot for reconnaissance, disposal, or surveillance.
Engineering track chassis with dustproof structure.
Climbs steep slopes/stairs and transmits HD video.

Key Specifications:
— Travel Speed: 0–5KM/h
— Endurance: 4H/16H
— Protection Level: IP65
— Obstacle Height: 300mm
— Mechanical Arm Degrees of Freedom: 6
— Climbing Ability: 80% (PBJOR-BY2), 75% (PBJOR-BY3)
— Gripping Weight: 30KG (extended), 60KG (retracted)
— Control: Wireless ≥2KM / Wired ≥100M

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XINIU 001 - ALL-WHEEL DRIVE DIFFERENTIAL UNMANNED VEHICLE

Can operate in environments such as mountains, hills, ravines, high mountains, deserts, and snowfields, transporting essential supplies, mission equipment, ammunition, medical supplies, and positioning communication equipment, reducing the burden on individual soldiers and improving operational efficiency.

Features and Advantages:
Strong endurance: With differential four-wheel drive, a travel speed of ≤20KM/h, and an endurance range of 45KM.
Good road adaptability: A maximum load capacity of 750KG, capable of climbing 30° slopes and crossing 40cm ditches.

Key Specifications:
— Maximum Load Capacity: 750KG
— Travel Speed: ≤20KM/h
— Endurance Range: 45KM
— Climbing Angle: 30°
— Driving Method: Differential four-wheel drive

DESERT SENTINEL
systems security

RECONNAISSANCE AND EXPLORATION

BEIYU XINIU 002 - SIX-WHEEL DRIVE DUAL STEERING UNMANNED TRANSPORT VEHICLE

Can transport essential supplies, mission equipment, ammunition, medical supplies, and positioning communication equipment in environments such as mountains, hills, ravines, high mountains, deserts, and snowfields, reducing the burden on individual soldiers and improving operational efficiency.

Key Specifications:
— Travel Speed: 0–5KM/h
— Endurance: 4H/16H
— Protection Level: IP65
— Obstacle Height: 300mm
— Mechanical Arm Degrees of Freedom: 6
— Climbing Ability: 80% (PBJOR-BY2), 75% (PBJOR-BY3)
— Gripping Weight: 30KG (extended), 60KG (retracted)
— Control: Wireless ≥2KM / Wired ≥100M

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RECONNAISSANCE AND EXPLORATION

BEIYU XINIU 003 - ALL-WHEEL DRIVE DUAL STEERING UNMANNED TRANSPORT VEHICLE

Features dual steering and dual driving at the front and rear, with a small turning radius. It provides excellent off-road performance and handling capabilities, suitable for transportation needs in narrow sections.

Key Specifications:
— Travel Speed: ≤15KM/h
— Endurance Range: 80KM
— Climbing Angle: 15°
— Control Method: Wireless remote control
— Effective Load Capacity: 800KG

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RECONNAISSANCE AND EXPLORATION

BEIYU XINIU 004 - UNMANNED LIFTING ROBOT

Suitable for scenarios such as: tobacco, pharmaceutical, food, chemical, postal, port, and airport.

Features and Advantages:
Dual drive, dual steering

Key Specifications:
— Rated Load: ≤500KG
— Travel Speed: ≤20KM/h
— Climbing Angle: 30°
— Temperature Adaptability: -20°C to 50°C
— Control Method: LIDAR unmanned driving, remote control, platform control

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RECONNAISSANCE AND EXPLORATION

BEIYU XINIU 005 - 5T HEAVY-DUTY LINE-CONTROLLED CHASSIS

Key Specifications:
— Rated Load: ≥5T
— Travel Speed: ≤10KM/h
— Endurance Range: ≥30KM
— Climbing Angle: 15°
— Protection Level: IP54
— Control Method: Remote control, platform control

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RECONNAISSANCE AND EXPLORATION

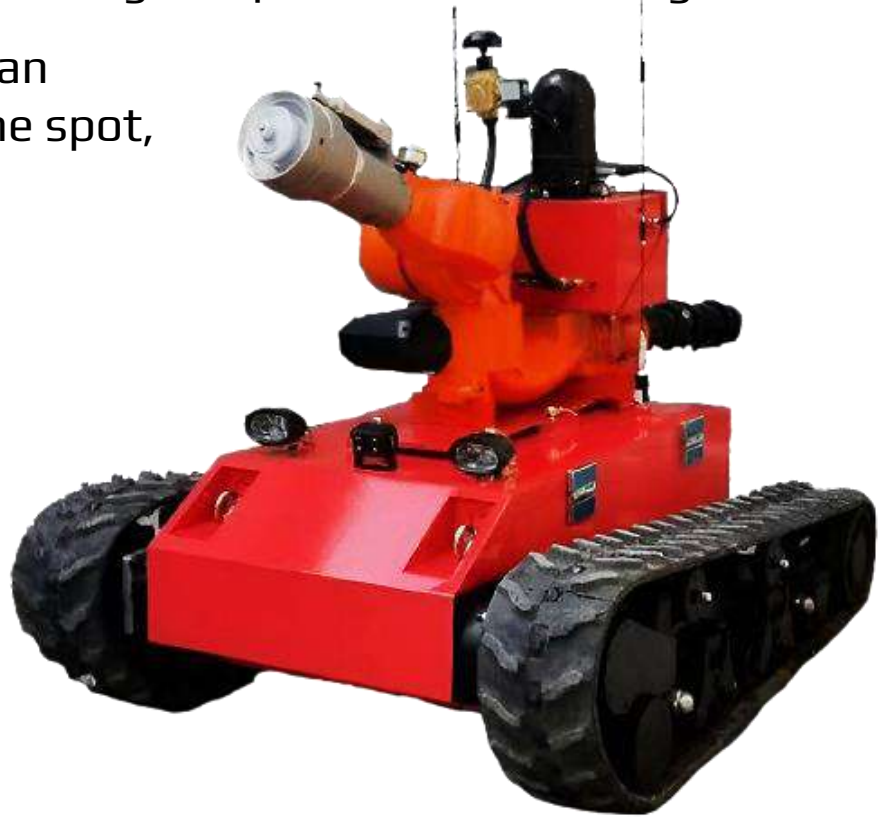
BEIYU HUJING 001 - FIREFIGHTING ROBOT

Features and Advantages:

Professional quality testing: The product is stable, technically advanced, reliable in quality, convenient to assemble and disassemble, and each unit has undergone professional tuning and performance testing.

Strong off-road capabilities: Powered by a direct current motor, using an engineering track chassis, flexible and mobile, capable of turning on the spot, climbing slopes and stairs, with strong off-road capabilities.

Professional sensor settings: Equipped with high-capacity firefighting water monitors and foam guns, with a long range and flexible control, convenient for deployment.



Configuration Parameters:
— Endurance Time: ≥2H
— Obstacle Height: 300mm
— Climbing Angle: ≥30°
— Traction Force: ≥5000N

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RECONNAISSANCE AND EXPLORATION

BEIYU HUJING 002 - FIRE EXTINGUISHING ROBOT

Features and Advantages:

Excellent endurance performance: The chassis is a wheeled two-wheel drive, with an endurance of more than 15km, and an infinite variable speed of 0–25km/h.

Good on-site adaptability: The suspension type uses a double wishbone suspension, with a climbing ability of ≥28% even when fully loaded; it can adapt to normal driving on roads 3.5m wide, and can automatically brake when encountering obstacles.

Real-time image transmission system: Allows for remote manual operation, wireless image transmission communication, with a remote control distance of ≥1.5km, equipped with a 360° gimbaled camera to transmit real-time images, and also has a two-way intercom function.

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RECONNAISSANCE AND EXPLORATION

BEIYU HUJING 003 - INTELLIGENT HYDRAULIC ROBOT

Features and Advantages:
Stable performance: Equipped with a 1200W dual-drive motor, it has fast speed, strong power, stable operation, and a long service life.
Good road adaptability: The widened rubber track chassis is suitable for rugged terrain and runs smoothly.
Real-time image transmission system: The vehicle is equipped with a telescopic water cannon platform, 360-degree gimbal, and camera, capable of real-time image transmission.
Dust and waterproof: The cabin is integrated with waterproof and dustproof electric control, making it easy to operate.

Configuration Parameters:
— Travel Speed: 3–4 KM/H
— Effective Load: 200 KG
— Control Method: Wireless remote control
— Remote Control Distance: 100–300 m

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Product category

IMMOBILIZATION & FIXATION

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IMMOBILIZATION & FIXATION

SPLINTS FOR FIXATION

Device designed for immobilizing bone and soft tissue injuries in emergency settings. Splint bends into any simple curve,it becoming exponentially stronger and more supportive.

Finger Splint

Pelvic Sling

A&Z (foam-covered, aluminum malleable) Splint

Splint Kit AZ-STK

CR-BD01C

Traction Splint

Aluminum Splint

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IMMOBILIZATION & FIXATION

TOURNIQUET

Tourniquets are vital devices for rapid hemorrhage control in trauma care. Designed to occlude blood flow from extremities, they are widely used in military, pre-hospital, and tactical medicine.

AZ Combat Tourniquet
Gen 8 Plus High Visible

Tactical Tourniquet SOF

Tourniquet Storage

Rats Tourniquet

Combat Tourniquet
CAT Gen 6

AZ Combat Tourniquet
Gen 7 Plus

AZ Combat Tourniquet
Gen 7 Plus

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IMMOBILIZATION & FIXATION

COMPRESSION BANDAGE

Effective Hemorrhage Control with Compact Compression Systems

Compression bandages are designed to apply controlled pressure to wounds, helping to minimize blood loss and stabilize injuries in the field.

Equipped with sterile dressings, elastic wraps, and anti-slip features, they enable fast and secure application under stress.

Widely used in tactical medicine, first aid kits, and trauma care environments.

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IMMOBILIZATION & FIXATION

FIRST KIT

First aid kits (IFAKs) are compact, mission-ready solutions designed to provide immediate access to critical medical supplies in high-pressure environments.

B002

IFAK

IFAK-SE

IFAK-001M

IFAK-Fanny Pack

IFAK-R9

IFAK-LEG BAG

IFAK-002M

IMMOBILIZATION & FIXATION

FIRST KIT

CONFIGURATION-7PCS/10PCS /17PCS

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IMMOBILIZATION & FIXATION

FIRST KIT

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IMMOBILIZATION & FIXATION

HEAD IMMOBILIZER

Head immobilizers are essential tools used during patient transport and spinal injury management.

Designed to restrict head and neck movement, they help prevent secondary trauma during evacuation.

Typically made of waterproof, easy-to-clean materials, they are compatible with spine boards and are suitable for both adult and pediatric use in emergency and rescue operations.

Universal Head Immobilizer AZ-HI01

Child Head Immobilizer AZ-HI04

Head Immobilizer AZ-HI05

Head Immobilizer AZ-HI06

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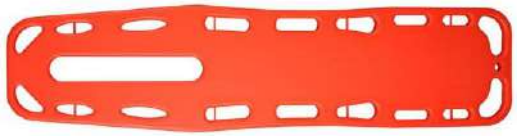
IMMOBILIZATION & FIXATION

SPINE BOARD

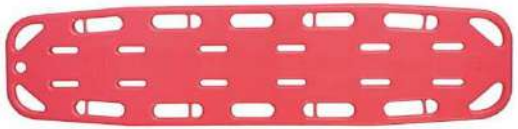
Rigid Support Platforms for Spinal Immobilization

Spine boards are essential for safely transporting patients with suspected spinal or cervical injuries. Their rigid structure ensures full-body support and minimizes movement during evacuation. Commonly used in trauma care, ambulance transport, and emergency response, these boards are compatible with head immobilizers and various restraint systems. Models are available for both adult and pediatric use, including options for CPR procedures.

Spine Board AZ-SP02

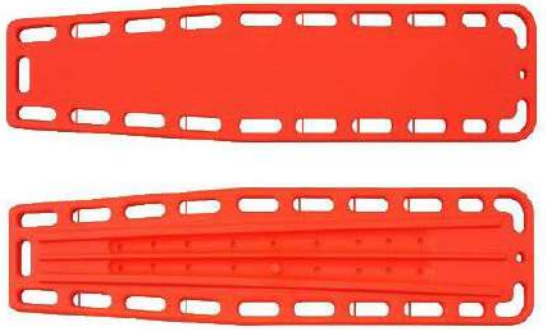


Child Spine Board AZ-SP06



Spine Board AZ-SP03

Spine Board AZ-SP04



CPR Board

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IMMOBILIZATION & FIXATION

MILITARY FOLDING STRETCHER

Folding stretchers are essential tools for safe and rapid evacuation in combat zones, rescue missions, and emergency operations. Their collapsible design allows for easy storage and transport, while durable materials ensure reliable support under demanding conditions. Commonly used in military, field hospitals, disaster response, and tactical medical units.

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IMMOBILIZATION & FIXATION

CERVICAL COLLAR & BRACE & STRAP

Adjustable Adult Cervical Collar

Inflatable Cervical Collar

The Philadelphia Adjustable Collar

Foam Cervical Collar

Walk Brace

ROM Knee Brace

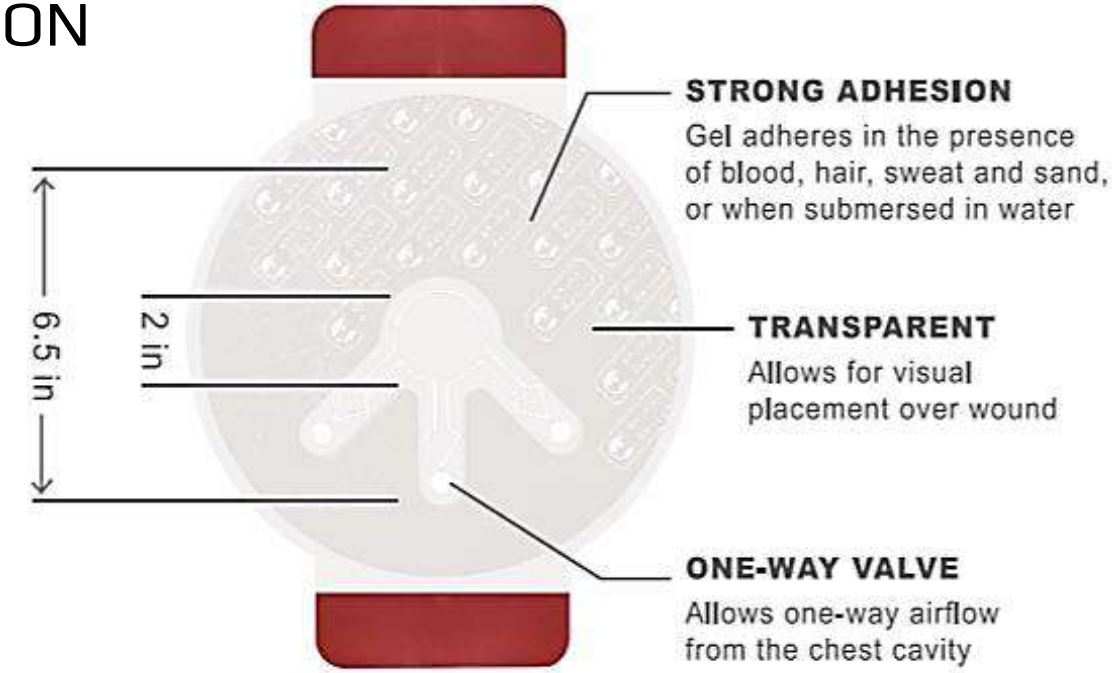
Shoulder Harness Restraint Strap

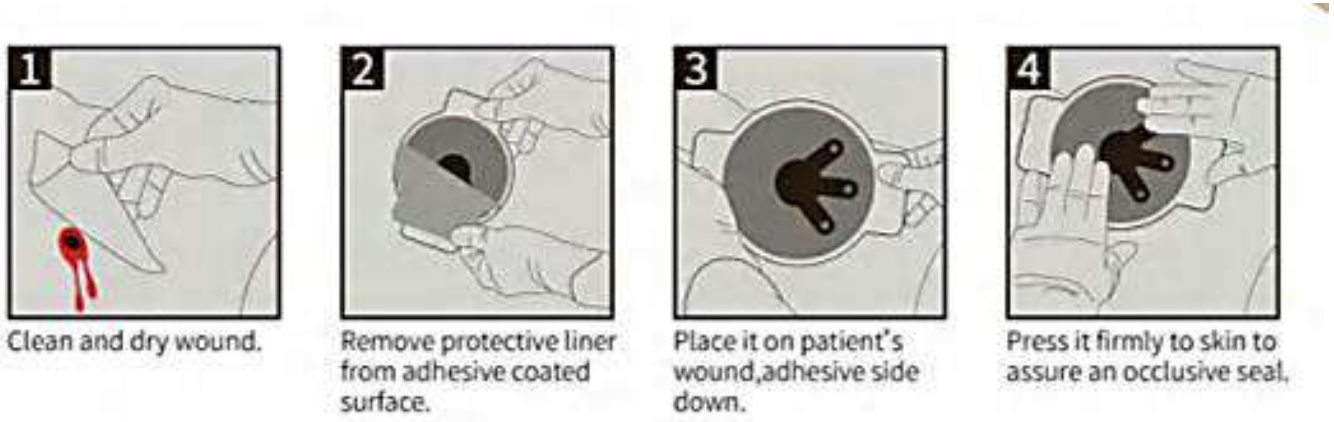
BioThane Coated Strap

Two PCS Metal Buckle with clips Strap

IMMOBILIZATION & FIXATION

CHEST SEAL





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IMMOBILIZATION & FIXATION

HYPOTHERMIA PREVENTION GEAR

Thermal Protection in Extreme Conditions
Hypothermia prevention gear is designed to retain body heat, protect against wind and moisture, and improve survival chances in harsh environments. Emergency thermal blankets, sleeping bags, and tube tents made from reflective materials help reduce heat loss and shield individuals from cold exposure.

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IMMOBILIZATION & FIXATION

WOUND DRESSINGS

Immobilization devices and wound dressings are necessary to treat injuries, prevent further tissue damage, and ensure optimal healing.

Bandages help maintain a moist environment in the wound, reduce the risk of infection and promote tissue regeneration.

The bandages are suitable for a wide range of clinical and field applications.

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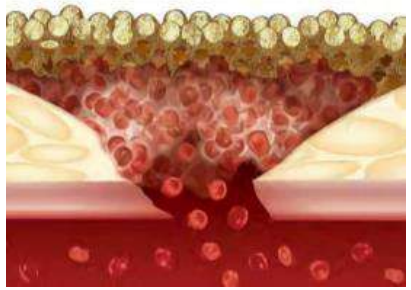
IMMOBILIZATION & FIXATION
HEMORRHAGE CONTROL PRODUCTS

The principle of operation



Zeolite Hemostatic Granules

Zeolite Hemostatic Gauze

Chitosan Hemostatic Gauze

Kaolin Hemostatic Gauze

Chitosan Hemostatic Granules

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IMMOBILIZATION & FIXATION

FIELD MEDICAL TENTS

Medical tents for rapid deployment and reliable operation in difficult conditions are universal solutions for providing shelter during emergency response, military operations and humanitarian missions. With customizable features, durable materials, and weather-resistant construction, they provide a safe, comfortable, and efficient workspace for medical and rescue teams anywhere, anytime.

QE015

Suitable for strong wind and snow load (North and South zones) Ideal for use as a medical station, accommodation, command post, logistics hub, etc.

QE016

Primarily designed for rescue missions, disaster response, field training exercises, and short-term field medical service operations in combat or emergency environments.

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