



SINCE 2017

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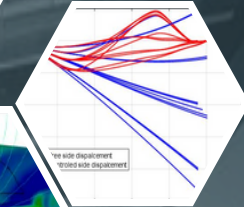
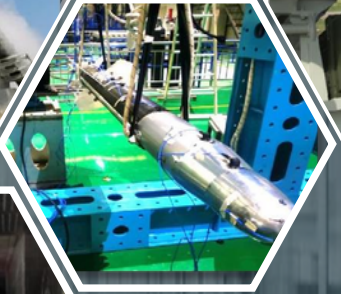
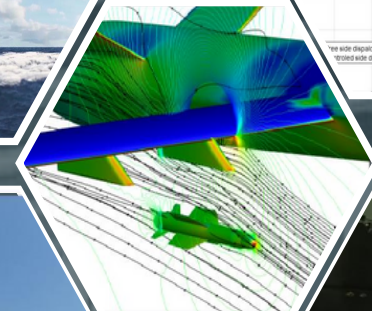
TUDES  
DEFENSE

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# OUR CAPABILITY



- ·Missile Research and Development
- ·Key component production
- ·Virtual Simulation
- ·Hardware-in-the-Loop Simulation
- ·Ground Test
- ·Flying test
- ·Sailing trial



# O U R P R O D U C T S



## DRONE

SA-180    XF-400  
WP-90    SA-10  
XF-180V    SA-20  
XF-260V    SA-50  
LY-100V



## U.S.V

LJ-800  
LJ-300  
FY-500



## MISSILE

Air-to-Ground Missile	Anti-Ship Missile
TX-10/10A	TX-20/75
TX-20/25A	TX-370
TX-20/50A	



# U n m a n n e d A e r i a l V e h i c l e

# SA-180

Power: PistonEngine

Payload: 50 kg semi-piercing armor warhead

Damage capacity: penetrate 800mm reinforced concrete or 30mm thick 921A steel plate

Endurance: 14 hours

Max take-off weight: 200kg

Cruise Speed:180 km/h

Cruise Altitude: 2,000-3,000 meters

Size: (L × W × H): 2.85 m × 2.6 m × 0.608 m

Fuel Tank Capacity: 90 liters

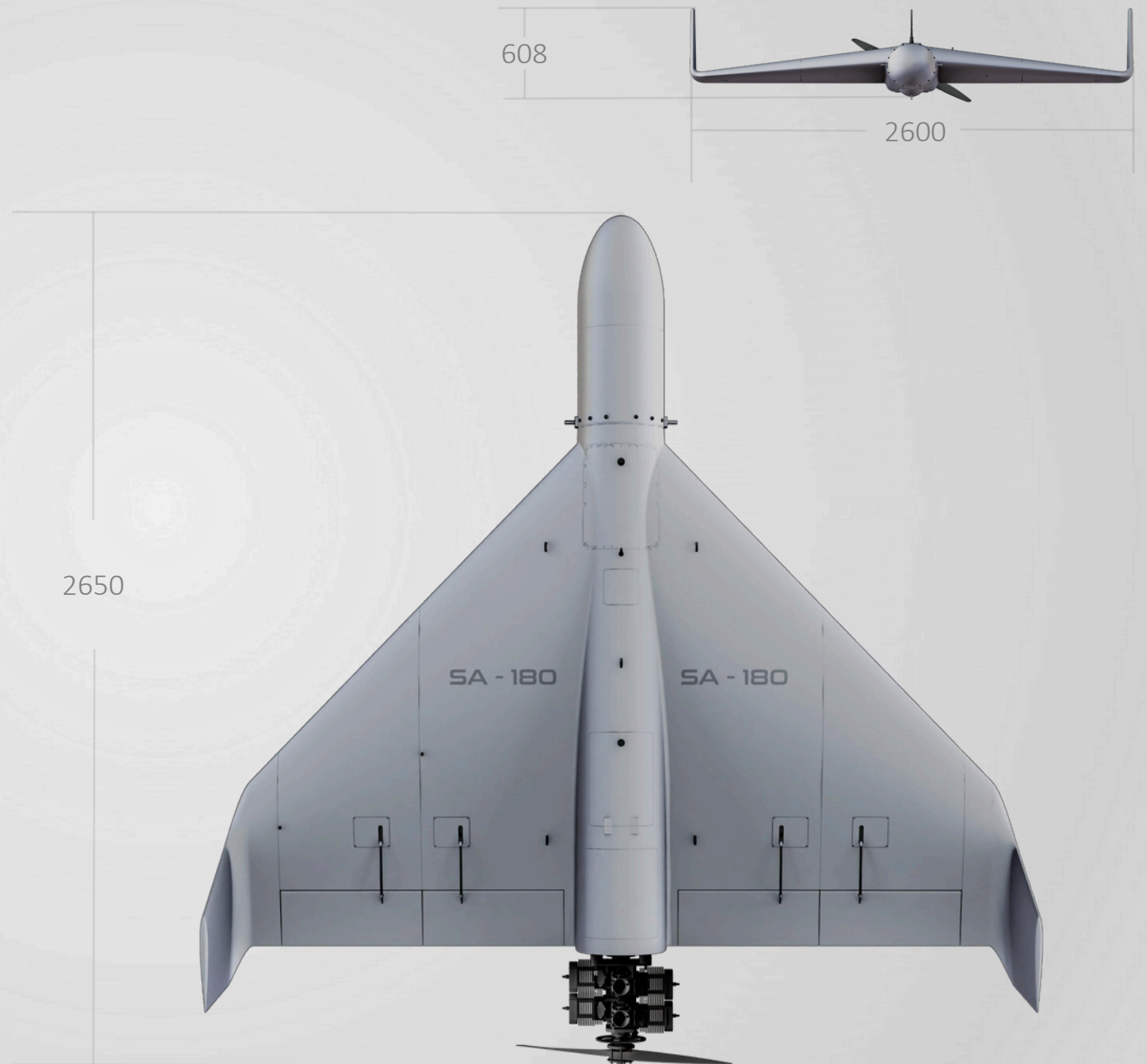
Max Range :  $\geq$  2400km

Ceiling: 0 to 5,000 meters

Wind Resistance:  $\geq$  Level 6

Working Temperature: -20°C to 50°C

Aerodynamic Layout: Flying Wing



# SA-180

550cc High Performance Piston Engine



## High Power Density Output:

With a maximum power of 37kW (7500rpm) at 550cc working volume and a power-to-weight ratio of 1.85kW/kg, the engine is powerful and lightweight, and is suitable for a wide range of aviation equipment. Reliable and stable operation: Natural air-cooling and CDI electronic ignition, together with omni-directional pump film carburetor fuel supply, ensure stable engine operation under complicated working conditions and reduce maintenance costs.

## Wide speed adaptability:

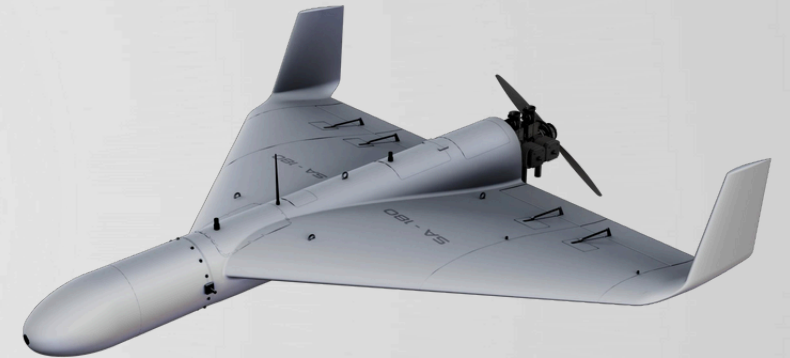
The speed range of 1500-7500rpm can flexibly cope with the needs of different flight phases, taking into account the economy of low-speed cruising and the power of high-speed operation.

## Convenient control design:

Electric start and servo motor control, easy to operate; support 12-14V wide voltage operation, compatible with mainstream power supply systems, to enhance the adaptability of the equipment.

## Long life and low maintenance:

The time between overhaul (TBO) is up to 300 hours, which is in line with the recommended propeller specifications, effectively prolonging the service life and lowering the cost of full-cycle use



# WP - 90

Power: Turbojet engine

Payload: 30kg

Endurance: 2.5 hours

Max take-off weight: 150kg

Cruise Speed: 216 km/h

Cruise Altitude: 2,000–3,000 meters

Size: (L × W × H): 2.617 m × 2.613 m × 0.358 m

Fuel Tank Capacity: 100L

Max Range: ≥ 500 km/h

Ceiling: 0 to 7,000 meters

Wind Resistance: ≥ Level 7

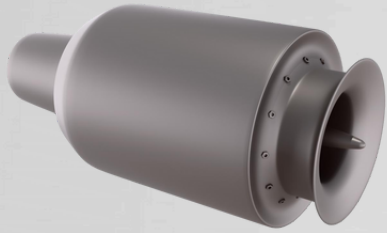
Working Temperature: −20°C to 50°C

Aerodynamic Layout: Flying Wing



# WP-90

550cc High Performance Piston Engine



High Engine Thrust: Max thrust  $\geq 55\text{kgf}$

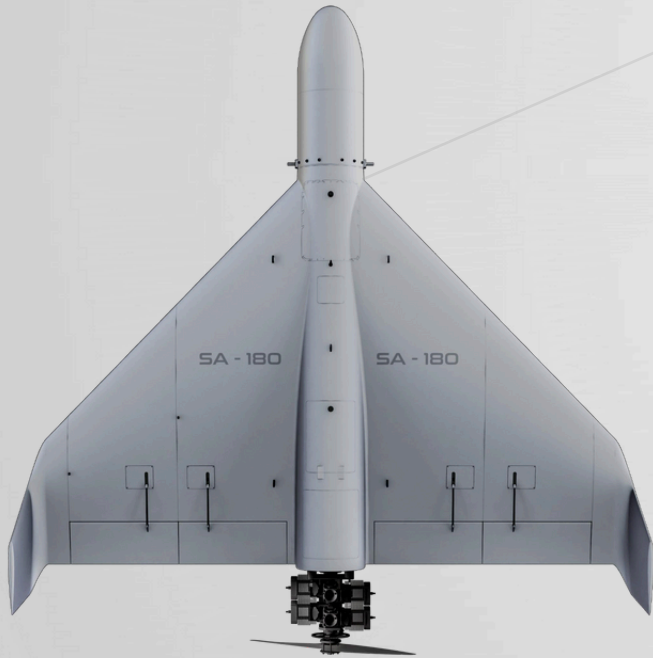
High Thrust to weight ratio: Max thrust  $\geq 55\text{kgf}$   
under MTOW 150Kg, Empower drone with excellent  
acceleration performance and maneuverability.

High fuel efficiency: Fuel efficiency  $1.35\text{kg}/(\text{daN} \cdot \text{h})$   
at full throttle, effectively reduce fuel consumption  
per unit thrust.



# SA-180 & WP-90

## MISSION PAYLOAD



Flight Control



Dual-light pods



MEMES Inertial  
Measurement  
Module



Anti-Jamming  
GNSS Modules



Data Link



Satellite  
Communications



AI Visual  
Navigation System



Anti-Radiation  
Seeker



# SA-180 & WP-90

Flight Control



**Accurate navigation and positioning:** Integrated professional navigation system, dual antenna high-precision positioning, heading accuracy of  $0.2^\circ$  (1m baseline).

**Good environmental adaptability:** Built in shock absorption and temperature compensation system, supports external compass, and can operate stably even at  $-40^\circ\text{C}$ .

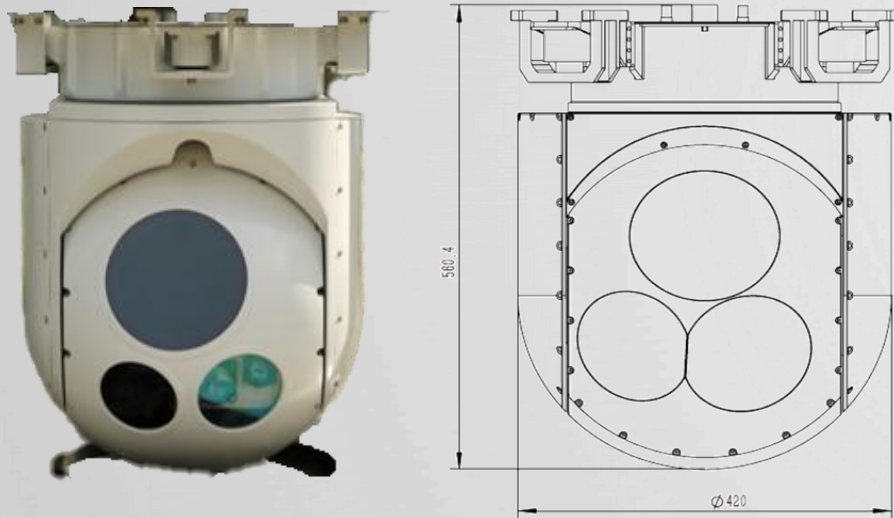
**Intelligent and efficient performance:** The engine automatically ignites, supports customized routes and various tasks, and is compatible with multiple device controls.

**Multiple safety guarantee:** 10+ emergency protection mechanisms, combined with automatic emergency landing and route planning, with long-term recording of flight data.

**Flexible Expansion and Data Management:** Reserve 3 expansion serial ports and 9 PWM channels, independently record 9 hours of flight data + 10000 task information, and support function upgrades.

# SA-180 & WP-90

## Dual-light Pods



Name	Details	Name	Details
Type	Two-axis, four-frame gimbal	Effective Pixels of Visible-Light	1920 × 1080
Weight	≤ 50kg	Horizontal FOV of Visible-Light	28.8°(H)×16.5°(V) ~ 0.51°(H)×0.29°(V) (±5%)
Dimensions	diameter φ420 mm × height: 580.4 mm	Effective Pixels of Cooled Infrared	640 × 512
Azimuth	n×360°	FOV of Cooled Infrared	17.06°(H)×13.68°(V) ~ 0.69°(H)×0.55°(V) (±5%)
Elevation	140° to +20°	Power consumption	Average: ≤350W Peak: ≤800W
Max LOS Angular Velocity	Azimuth: ≥60°/s Elevation: ≥60°/s	Control Interface	RS232 / RS422
Max LOS Angular Acceleration:	Azimuth: ≥100°/s <sup>2</sup> Elevation: ≥100°/s <sup>2</sup>	Video Output	Internet / RS422
LOS Angular Position Accuracy:	Azimuth: ≤0.5 mrad (1σ) Elevation: ≤0.5 mrad (1σ)	Working Temperature	-40°C to +60°C
Power input	18V–36V	Storage Temperature	-55°C to +70°C

# SA-180 & WP-90

EO/IR Seeker



Name	Specification	Name	Specification
System	Gyroscopic stabilization	EO pixel (8mm)	2560x1440 @ 60 fps
Weight	≤ 280 g	EO FOV	51°× 30°
Type	2 Axis	IR pixel (18mm)	1405x1120 @ 60 fps
Azimuth Range	-90° +90 °	IR FOV	24°× 18°
Pitch range	-90° +30 °	Frame rate	60 Hz
Maximum angular velocity	≥ 60°/s	Tracking speed	±48 pixels/frame
maximum angular acceleration	≥ 90°/s <sup>2</sup>	control interface	RS232 / RS422
Angular position accuracy	≤ 0.3°	video output	Ethernet / RS422
Power Supply	14 – 28 V	Working temp	-40°C - +60°C
Power	Avg ≤ 10 W,Max≤ 20 W	Storage temp	-50°C - +70°C
Shock	≥ 400 g		

# SA-180 & WP-90

Satellite

Communications



Features: Compatible with GEO/MEO/LEO satellite Internet  
Occasions: Portable/unmanned aerial vehicle/vehicle/boat and other platforms

Working mode: Ka Multi-beam phased array

Number of channels: R/T, 1024ch/1024ch

Orientation EIRP:  $\geq 40\text{dBW}$  (@27.5GHz)

Orientation GT:  $\geq 5.7\text{dBk}$  (@17.7GHz)

Polarization mode: Left and right circular polarized wave, settable

Tracking methods: Program tracking, automatic tracking

Tracking accuracy: less than 1/4 of the power beam width

Working Angle: Azimuth  $0^\circ$  to  $360^\circ$

Off-axis Angle:  $\geq \pm 60^\circ$

Forward link: DVB-S2X VLSNR/ACM

Backward link: SCPC ACM

Rate: 30/50Mbps (GEO/LEO) forward

15/16Mbps (GEO/LEO) backward

Interface: +24V/+28V powering/ Standard Gigabit network

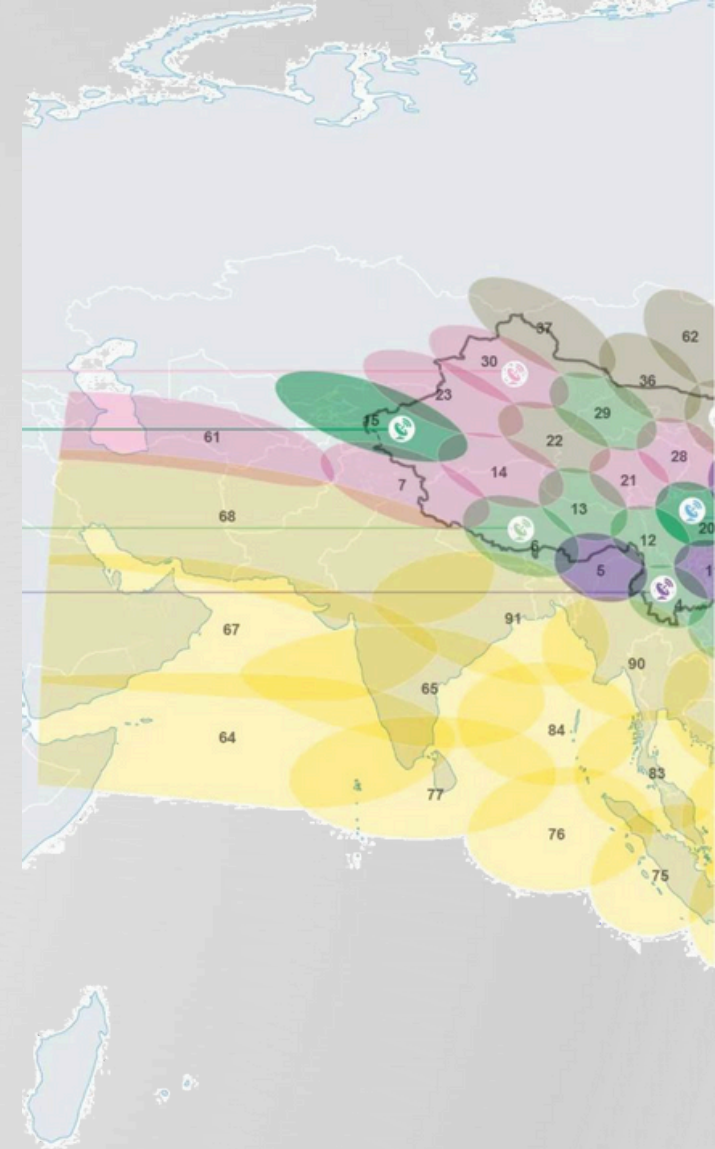
Volume: 450mm×290mm×33mm

Weight:  $\approx 4\text{kg}$

Power consumption:  $\approx 280\text{W}$

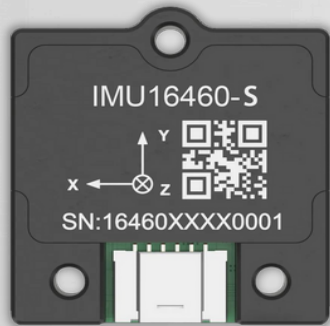
Working Temperature:  $-40^\circ\text{C} \sim 55^\circ\text{C}$

Protection grade: IP67



# SA-180 & WP-90

MEMES



LR100MEMES MEMS IMU

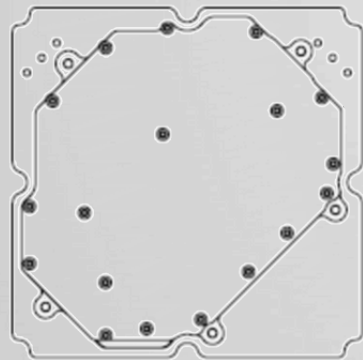
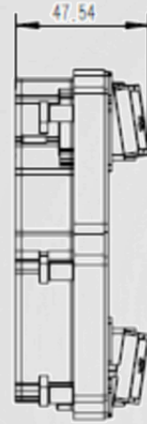
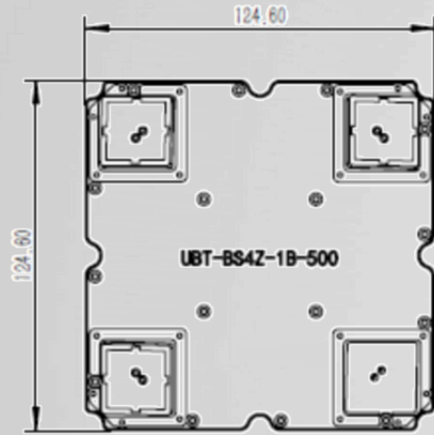
**LDual mode navigation guarantee:** The autopilot supports an external IMU inertial navigation system, which can switch to pure inertial navigation mode in case of interference to ensure stable flight.

**LHigh precision measurement module:** The LR100 MEMS IMU integrates three-axis gyroscopes and three-axis accelerometers, significantly improving measurement accuracy through temperature compensation and inter axis error calibration.

**LFlexible data output configuration:** Default broadcasting of 40 bytes IMU data at a frequency of 200Hz; The communication baud rate (up to 921600bps) and output frequency (up to 1000Hz) can be customized as needed, suitable for diverse application scenarios.

# SA-180 & WP-90

## Anti-Jamming GNSS Modules



### **Multi frequency signal processing capability:**

Integrated 4-channel BDS-B1/GPS-L1/GLO\_G1/Galileo\_E1 signal reception, down conversion, and amplification functions, supporting the combination and forwarding of filtered RF signals to the receiver, achieving joint anti-interference of multiple systems.

### **Lightweight and low consumption design:**

Small size, light weight, low power consumption, with good electromagnetic compatibility and adaptive anti-interference processing capability

### **High integration features:**

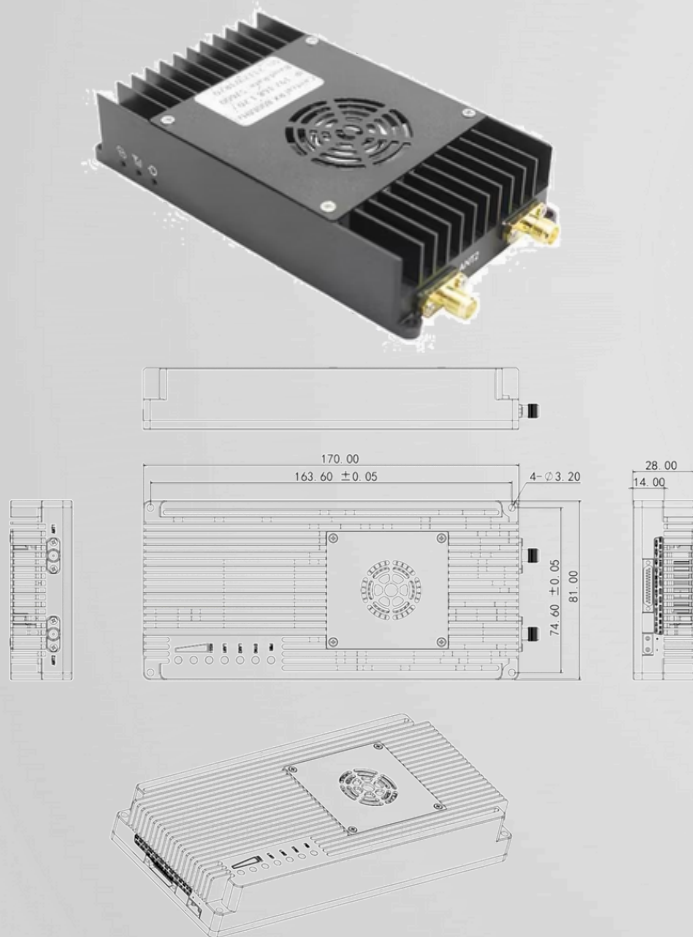
Adopting a low-noise, high gain frequency signal processing module, the antenna components and receiver are independently interchangeable, with good array consistency and minimal mutual coupling.

### **Space time joint anti-interference:**

By using adaptive anti-interference technology, it can simultaneously counteract three different directions and types of combined interference sources, and achieve high-precision positioning and precise timing even under strong interference.

# SA-180 & WP-90

Data Link



## Long distance and large bandwidth transmission:

Supports 4M bit rate transmission up to 200km (in a good environment), with a high-speed rate of up to 15.1Mbps under 10MHz bandwidth Intelligent anti-interference system: Integrated real-time interference detection and adaptive frequency selection technology, automatically matching the optimal frequency point, combined with anti multipath design to enhance communication stability in complex environments.

## Dynamic transmission optimization:

Equipped with adaptive bitrate (automatically adjusting modulation mode based on signal quality), automatic power control (near-field energy-saving), intelligent antenna switching, and dynamic allocation of upstream and downstream bandwidth.

## High data reliability:

By implementing an automatic retransmission mechanism for sudden erroneous data, along with low latency design ( $\leq 10\text{ms}$ ), ensure zero loss of critical data transmission.

## Multi interface and multi device collaboration:

Provide 2 Ethernet ports and 4 serial ports (RS232/TTL/RS422/SBUS), supporting 6 sets of devices to work on the same fixed frequency Flexible frequency configuration: Support dual frequency matching between software configuration and hardware switch frequency match

# SA-180 & WP-90

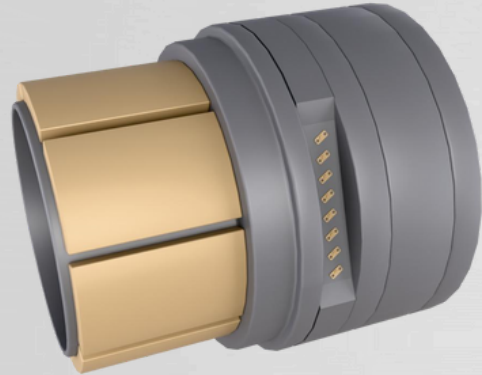
## AI Visual Navigation System



	Specification	Band	Value
Imaging performance	FOV		8 $\mu$ m - 12 $\mu$ m
	Size (L x W x H)		96°x77°
Electrical	Weight		80mmx66mmx66.8mm
	Input voltage		150g
	Power		8 - 28V DC
Adaptability	Drone		≤8W
	Altitude		Multiple Drone application
Pilot performance	Positioning accuracy		200m - 5000m
			10m - 30m
Functional configuration	Software		AI + High performance algorithm
	Communication Interface		RS232/RS422 / Gigabit Ethernet

# SA-180 & WP-90

Anti-Radiation Seeker



Weight:  $\leq 5\text{kg}$  (including antenna cover, cable, bracket, and housing). Power Supply and Load Power supply Supply Voltage:  $28\text{V}\pm 3\text{V}$ ; Power consumption:  $\leq 200\text{W}$ 。 Detection distance:  $\geq 20\text{km}$ 。 Self-checking time:  $\leq 20\text{s}$ ; Continuous working time:  $\geq 5\text{min}$ ; Working bandwidth:  $x\sim xx\text{GHz}$ (Can be customized by request) Instantaneous bandwidth:  $1\text{GHz}$ ; Sensitivity:  $\leq -65\text{dBm}$ ; Dynamic range:  $80\text{dB}$ ; Anti burn power:  $30\text{dBm}$ ; Pulse width range:  $0.5\sim 500\mu\text{s}$ ; Repetition frequency range:  $150\text{Hz}\sim 150\text{kHz}$ ; Az:  $-30^\circ\sim +30^\circ$ , El:  $-30^\circ\sim +30^\circ$ ; Angle measurement accuracy:  $\leq 1^\circ$  ( $1\sigma$ );

# SA-180 & WP-90

## Stealth Coating



### Stealth coating

- I Good conductivity and excellent stealth performance
- I Strong adhesion of paint film and excellent impact resistance
- I Cost-effective
- I Simple and convenient use

### Advantage

This stealth coating applied on SA-180 drone surface, can reduce the RCS of SA-180 from 2m<sup>2</sup> to 0.3m<sup>2</sup>, achieve the same stealth performance as Harop from Isreal.

	Specification
Color	Gloss
	Light Yellow
Solid Content	Matte finish
	33%
Recommended dry film thickness	25-50um
Spread rate	•8 m <sup>2</sup> /kg
Density	1.18g/cm <sup>3</sup>
Complete drying time	≤ 12 h
Adhesion	≤ Level 1
Surface Resistivity	≤ 0.5 ohm

# LY-100V

Length:3.5M

Rotor Diameter/Wingspan:6.0M

Maximum flight time:8h(reconnaissance)

Cruise Speed:180km/h

Maximum take-off weight:100kg

Power System:Piston Aircraft Engine

Maximum load weight:25kg

Take-off and Landing Methods:VOTL (Can  
take off and land on ships)

Ceiling:5000M

Wind Resistance:Level 6 wind

Fuel Tank:30L



# XF-400

Length:4.4M

Rotor Diameter/Wingspan:8.5M

Maximum flight time:18h(reconnaissance)

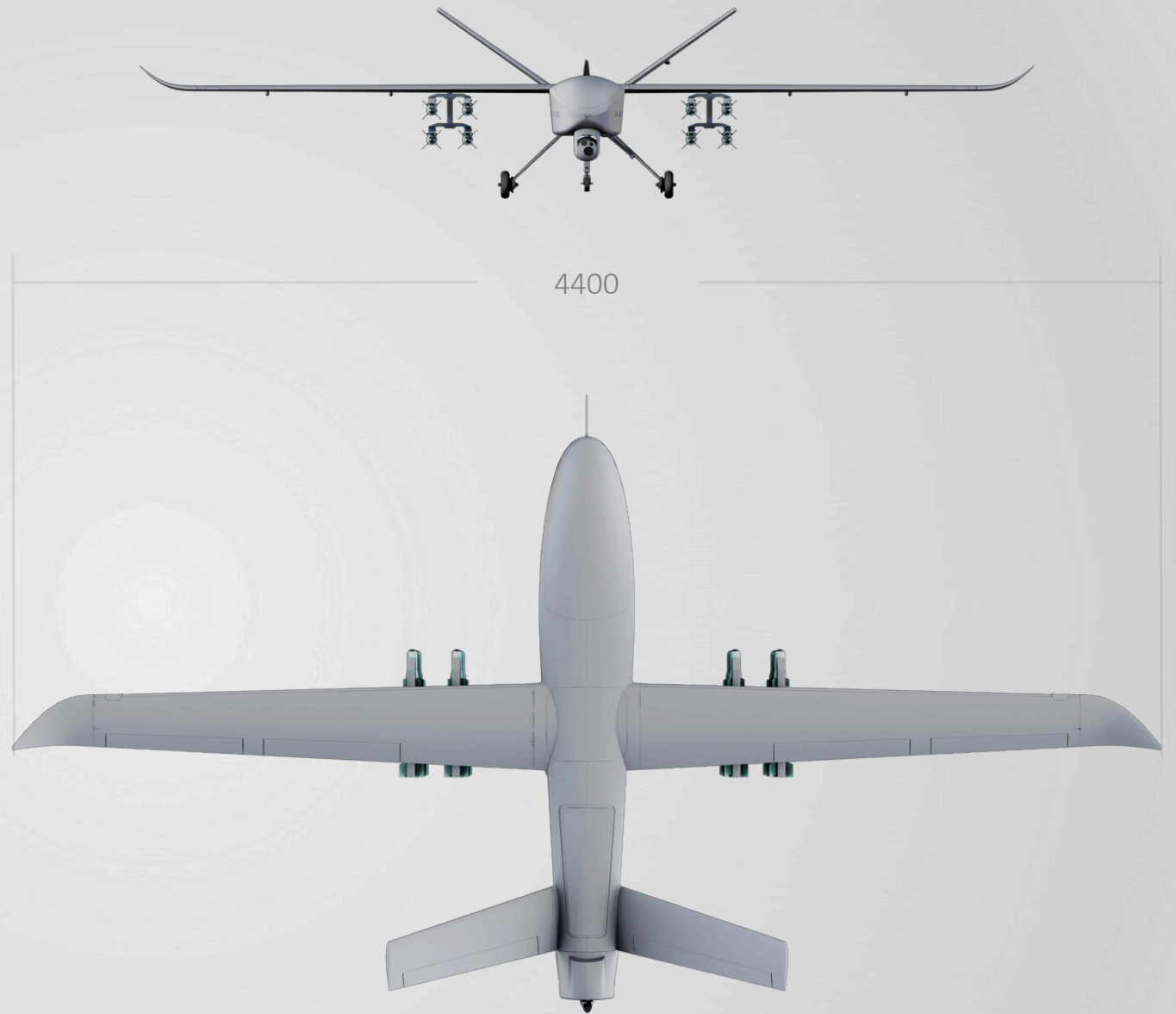
8h(reconnaissance + Strike)

Cruise Speed:160km/h

Maximum take-off weight:380kg

Fuel type:95 gasoline + two-stroke  
lubrication oil

Maximum load weight:150kg



# XF-400

W e a p o n

TX-10/10A × 8



Target type	Vehicle, Light armored vehicle, Small buildings, Small vessel and ship
Mass	~ 10kg
Max. Range	8km(relative height 3.5km, hover) 13km (relative height 6km)
Guidance type	INS+SLAS (basic type) INS(data-link)+infrared TV (improved type)
CEP	≤1m
Hit Probability	≥90%
Propulsion	Solid Rocket Motor
Warhead	3kg blast-fragment warhead
Damage capacity	>20m radius of fragment intensive kill
Launch type	Railway launch

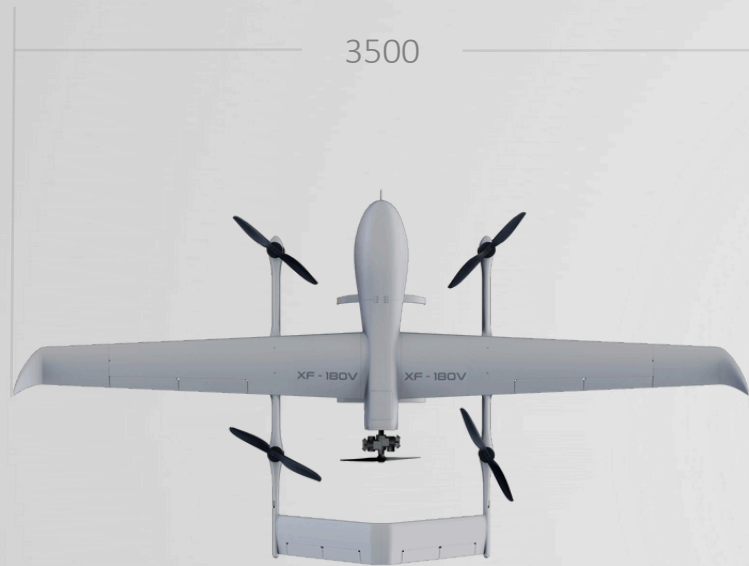
OR

Target type	Vehicle, Light armored vehicle, Small buildings, Small vessel and ship
Mass	~ 25kg
Max. Range	16km(fixed target) / 18km(moving target, relative height 7km)
Guidance type	INS/GNSS+SALS
CEP	≤1m
Hit Probability	≥90%
Propulsion	Solid Rocket Motor
Warhead	7.6kg tandem armor-breaking and blasting warhead ≥1060mm penetrating depth of static armor vertically;
Damage capacity	≥80% penetration rate of 320mm/68° homogeneous armor target plate with & without reactive armor
Launch type	Railway launch/Gravity drop

TX-20/25A × 2



# XF-180V



Length 3.5M Wingspan 6.97M Max endurance 6hr  
Cruise speed 126km/h MTOW 180kg Fuel type  
95#gasoline+Two stroke lubricating oil Max  
payload 40kg

# XF-260V

4350



Length 3.5M Wingspan 6.97M Max endurance 6hr  
Cruise speed 126km/h MTOW 180kg Fuel type  
95#gasoline+Two stroke lubricating oil Max  
payload 40kg

# SA-20



Length	1.6 M
Wingspan	Front 1.75M Rear 1.4M
Endurance	1 hr
Cruise speed	130km/h
Max speed	180km/h
MTOW	21.5 kg
Launching	By launch tube
Flight mode	Manul flight, automatic route flight
Max payload	7.5 kg

# XF-260V



Length	2.22M
Wingspan	Front 2.82M Rear 2M
Endurance	2.5hr
Cruise speed	170km/h
Max speed	230km/h
MTOW	55 kg
Launching	By launch tube
Flight mode	Manul flight, automatic route flight
Max payload	25 kg



# Unmanned Surface Vessel

# LJ-800

## Unmanned boat attacking system

Length: 12.7 m

Displacement: 13.5 t

Load: 3000 kg

Endurance:  $\leq$  14 h

Communication mode: Satellite communications, data links, shortwave communications

Control mode: Long-distance autonomous/half-autonomous/personnel

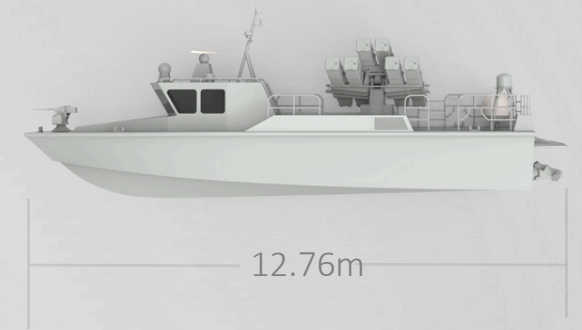
Control ability: One ship autonomous/cluster cooperation

Mission payload: Early warning radar, photoelectric turret, electronic jamming equipment, etc

Survival Ability: Working at 4th sea state self-preservation at 5th sea state

Max. speed: 45knot

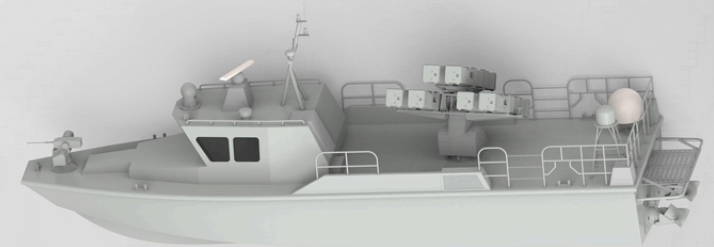
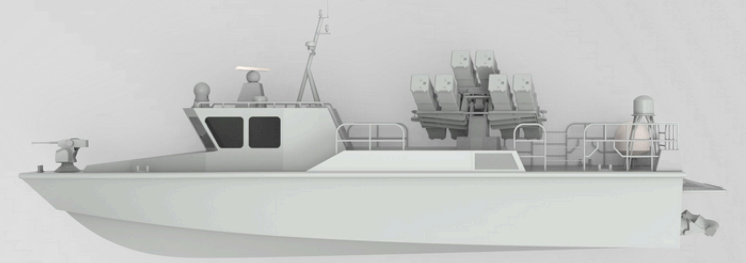
Max. range:  $\leq$  800km



# LJ-800

The unmanned boat attacking system is developed to meet the operational requirements of "integrated surveillance and combat" to quickly respond to local military conflicts.

- Equipped with advanced navigation, detection and communication systems for close-in target reconnaissance and long-range communications;
- With domestic advanced unmanned autonomous control technology, it can realize single-boat autonomous control and multi-boat autonomous cooperative combat;
- Integrated with the custom-developed missile weapon system for unmanned craft, it has strong combat capability against medium and large surface targets.



# LJ-800

## Unmanned boat attacking system

### Phototurret

Operating mode : infrared/  
visible light/laser  
Azimuth: N×360°  
Target recognition:  
infrared 14km  
visible light 10km  
Laser range: 200m~20km  
Pointing Range: M6km  
(sea)  
Irradiation energy: ≥80mJ

### Panoramic HD camera

Azimuth: N×360°  
Resolution: 1920×1080 pix

### Active electronic jamming

Frequency band: CMW/MMW  
Counter measures: Noise  
suppression +range spoofing  
Equivalent power: 2kW

### Waring Radar

Working band: X-  
band  
Search range: 20km  
to sea、60km to air

### Satellite communication system

Working band: Ku band  
Uplink bandwidth: ≥2Mbps  
Communication mode: FDMA  
Networking mode: SCPC  
Network delay: ≤500ms

### Machine-gun station

Caliber: 7.6mm  
Load capacity:  
200  
Range: 1.5km

### Unmanned Boat

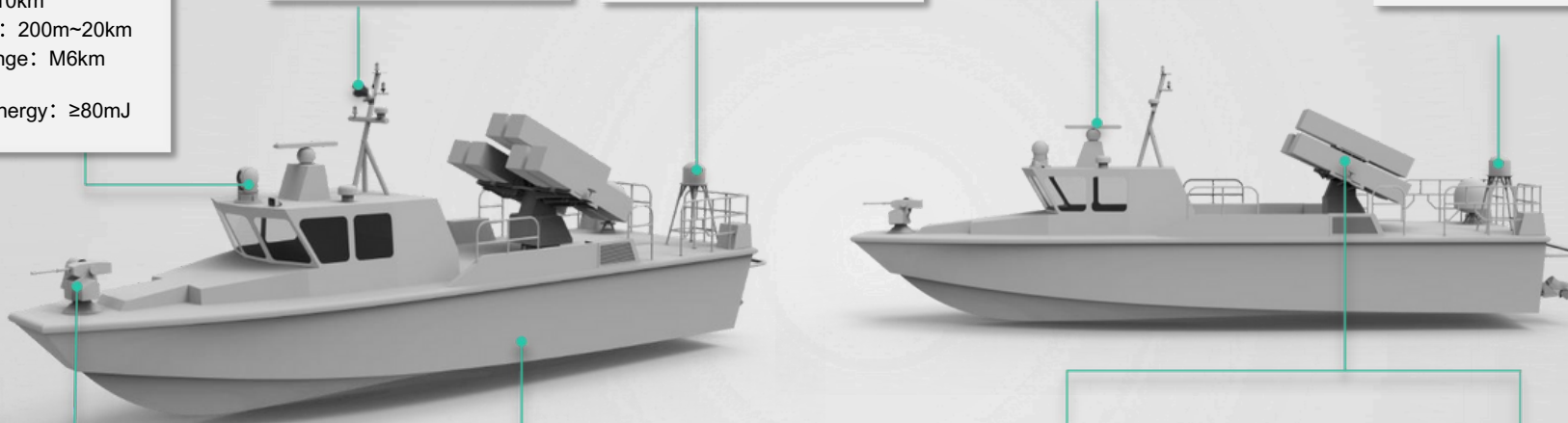
Length: 12.7m  
Displacement: 13.4t  
Load: 3000kg  
Max. range: 800km  
Max. speed: <36kn  
Endurance: 14h  
Control Mode: Long-distance  
autonomous/half-autonomous/personnel  
Control ability: One ship autonomous/  
cluster cooperation  
Survival Ability: Working at 4th sea  
state .Self-preservation at 5th sea state

### Missile weapon system

Target: War Ship (500t) , Vehicle,  
Light armored vehicle, Small  
buildings, Small vessel  
Weight: 75kg  
Loading: 6-pack/8-pack  
Max Range: 18km  
Guidance mode:  
INS/GNSS+SALS  
INS/GNSS+MMW  
Accuracy: CEP1m~2m  
Hit Probability: 90%  
Warhead: 34kg BFW、SAPW

### Target missile training system

Simulated target : subsonic anti-  
warship missile  
Weight: ~58kg  
Loading: 6-pack/8-pack  
Max Range: 20km  
Guidance mode : inertia/DATA-LINK  
Ballistic : trajectory, patrol  
Patrol height : 7m~200m  
(changeable) Simulated RCS :  
0.1m~0.25m2  
Position accuracy: 50m (horizontal)  
Self-destruction: auto/remote



# LJ-800 Application

Application scenario I: In peacetime, island reef surveillance, patrol and emergency strike

Mainland



Island surveillance and patrol



Phase 1:  
Drive away by sound and light



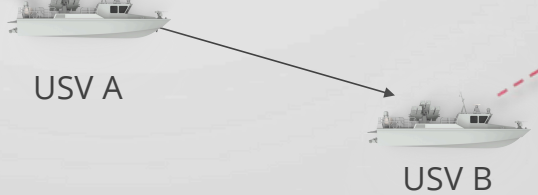
Phase 2:  
Warning shots



Phase 3: Missile strikes



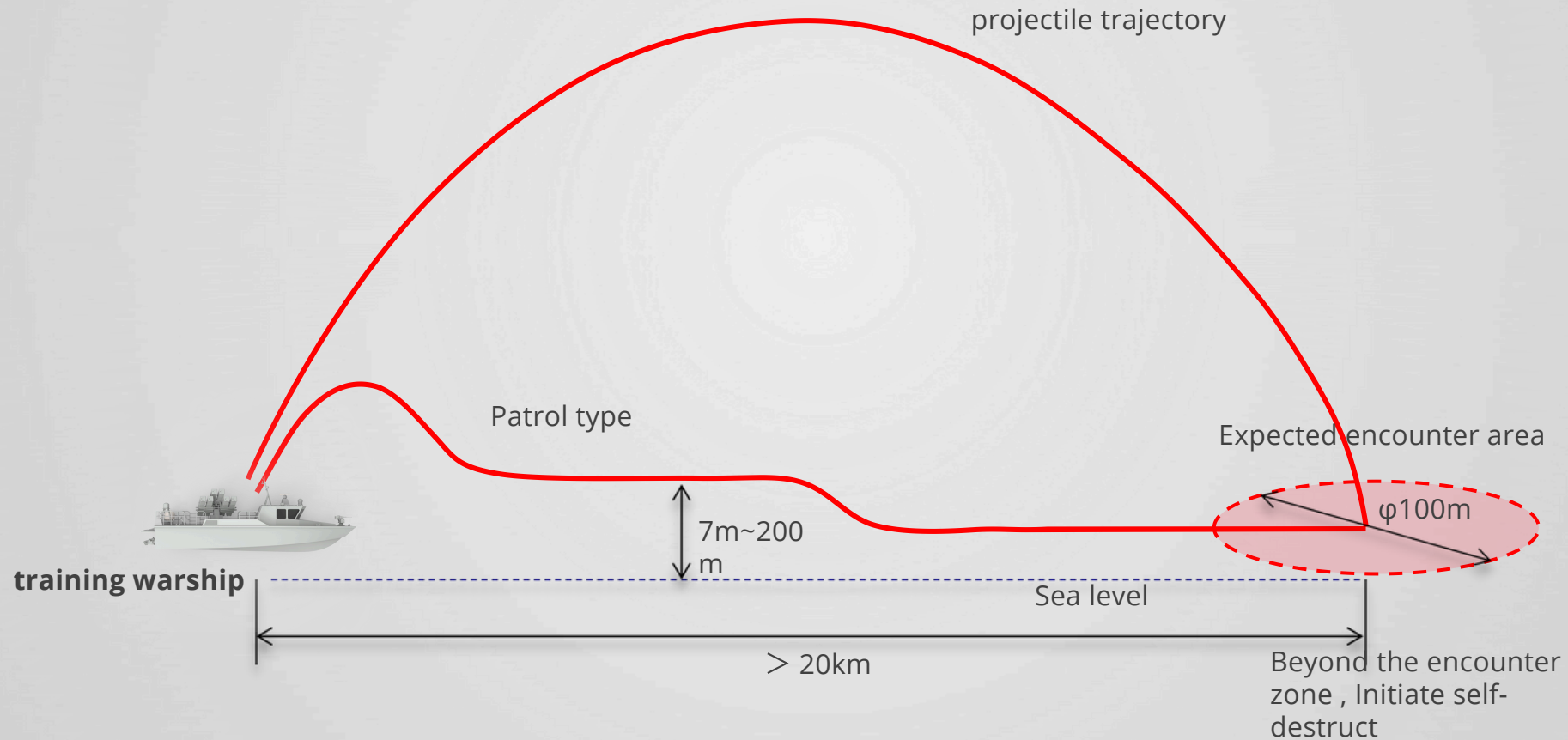
Laser instruction



Ocean

# LJ-800 Application

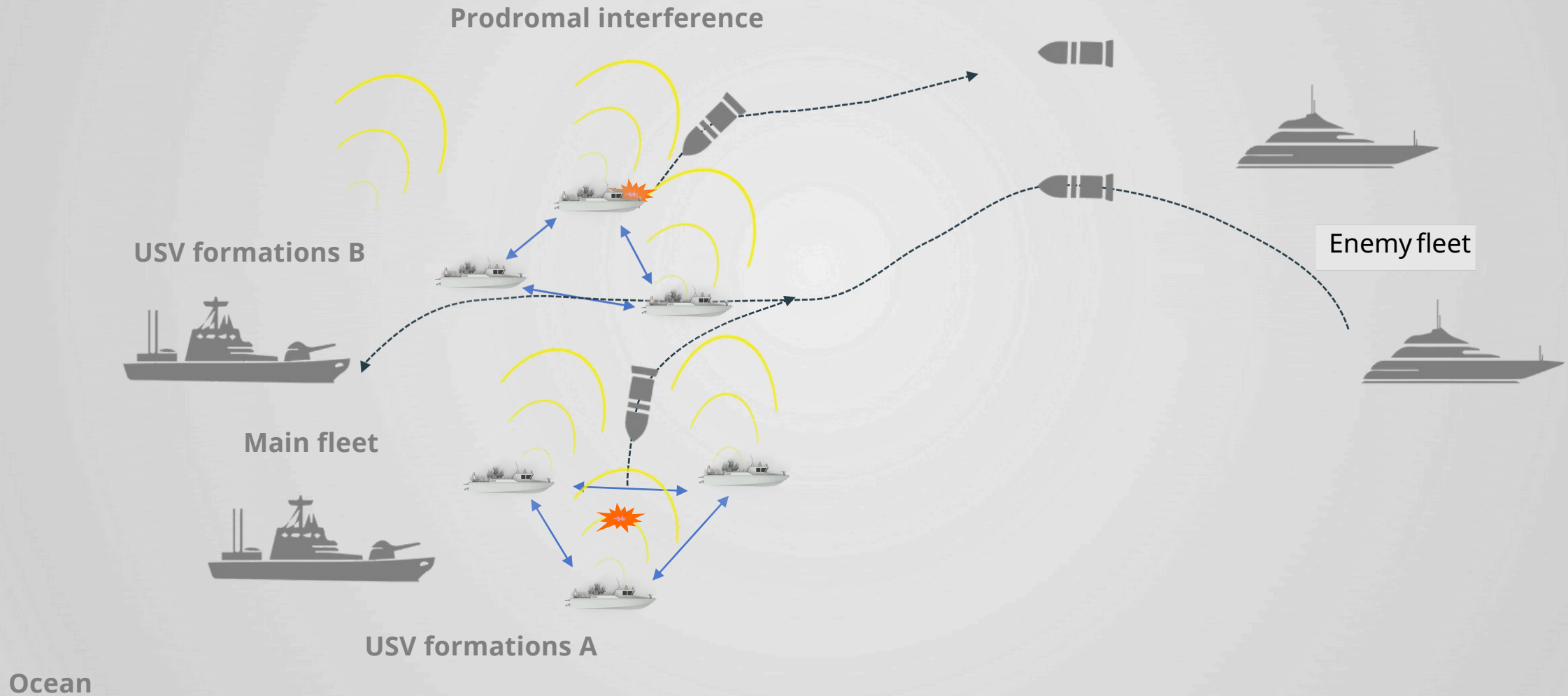
Application scenario II: In peacetime, offensive & defensive confrontation training



Ocean

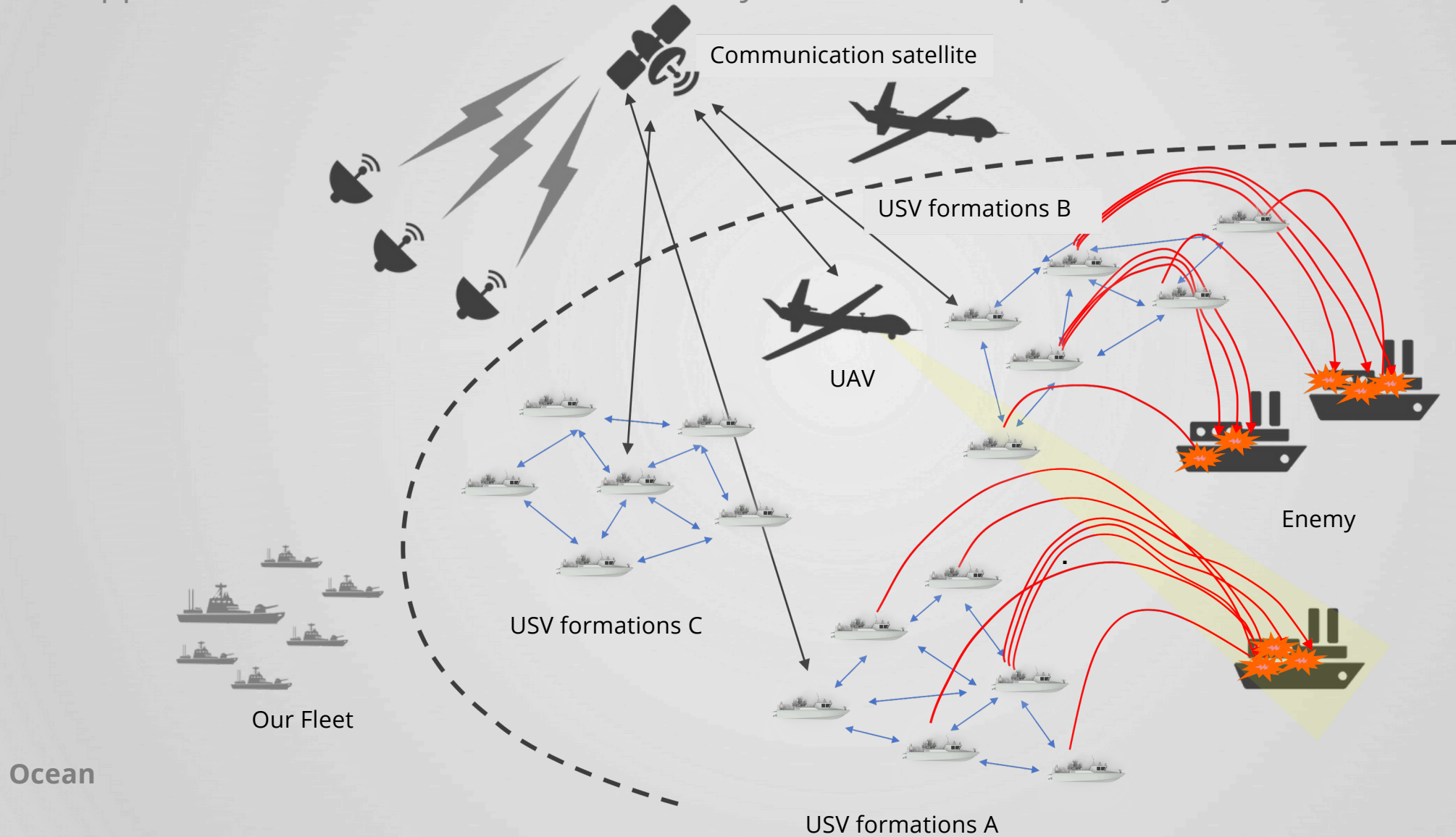
# LJ-800 Application

Application scenario III: In wartime, accompany the main warship and perform protection



# LJ-800 Application

Applicationscenario IV: Inwartime, the system works cooperatively, and cluster attacks



# LJ - 300

## Unmanned boat attacking system

Length: 7.5 m

Displacement: 4.5 t

Load: 1000 kg

Endurance: ⚡ 24 h

Communication mode: Satellite communications, data links, shortwave communications

Control mode: Long-distance autonomous/half-autonomous/personnel

Control ability: Close-in reconnaissance, target tracking, warning and eviction, patrol monitoring, hydrogeological exploration, sea rescue

Mission payload: Early warning radar, photoelectric turret, electronic jamming equipment, etc

Survival Ability: Working at 4th sea state self-preservation at 5th sea state

Max. speed: 15knot

Max. range: ⚡ 310 nautical miles



7.5m

# LJ - 300

Unmanned reconnaissance boat is developed to meet the operational requirements of “Non-stop search and reconnaissance

- The environment sensing system consists of navigation radar, Lidar, panoramic HD camera, AIS and meteorometer;
- With all-weather, high precision, dynamic and reliability advantages;
- The life-saving equipment is a standard inflatable life raft that can accommodate more than 6 people;
- The photoelectric equipment has two modes of visible light and infrared to carry out photoelectric search and tracking locking function.

# FY-500

Unmanned boat attacking system

Length: 5.5 m

Width: 1.5 m

payload: 450kg

Load: 1000 kg

Communication mode: Satellite communications, data links,  
shortwave communications

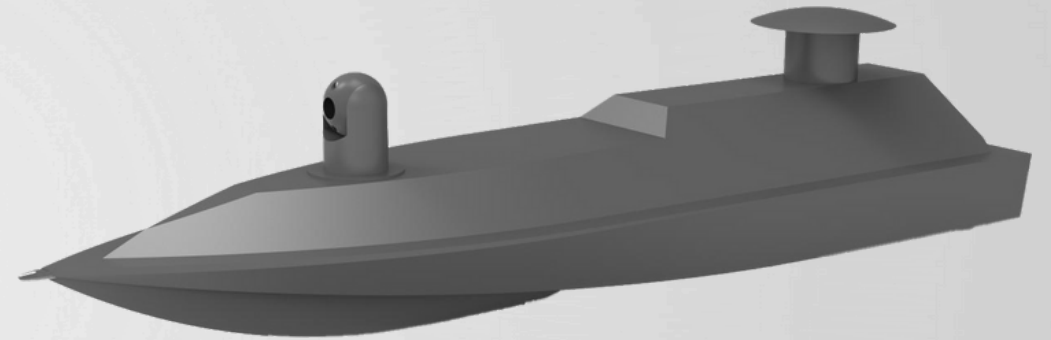
Control mode: Long-distance autonomous/half-autonomous

Control ability: One ship autonomous/cluster cooperation

Survival Ability: Working at 4th sea state self-preservation at 5th  
sea state

Cruising speed: Maximum speed 50 knots

Max. range: <math>\leq 500</math> nautical miles



# FY-500

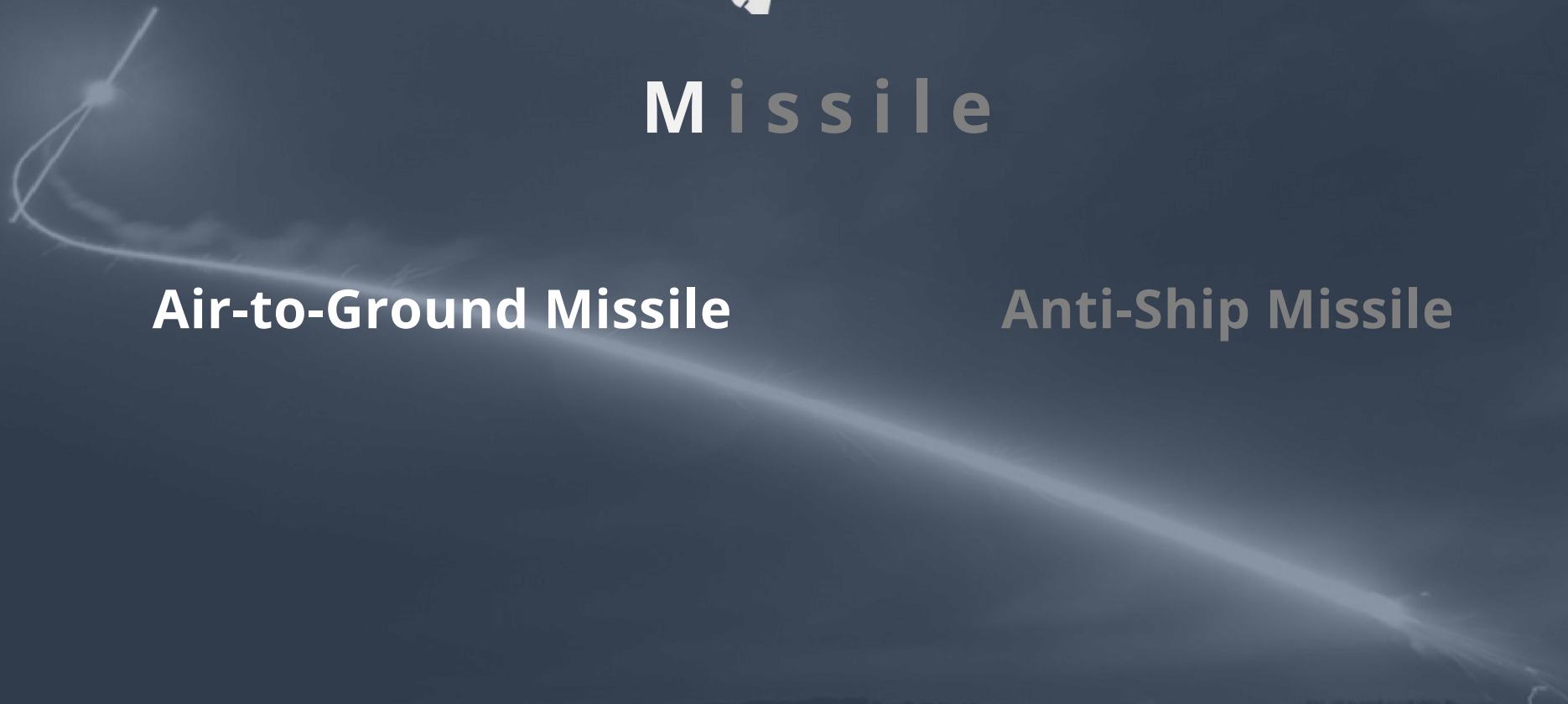
- Low cost, easy to maintain, easy to operate, designed for single tasks;
- High performance monohull configuration with burst speeds of more than 50 knots and high seas cruising ranges of up to 500 nautical miles;
- With a payload capacity of up to 450kg, it can integrate a variety of payloads, including warheads for suicide missions;
- Equipped with an advanced autonomous mission planning system that can be operated remotely or autonomously and operand intervention can be selected during the mission;
- Support multi-boat formation, collaborative operation..



# Missile

**Air-to-Ground Missile**

**Anti-Ship Missile**



# TX-10/10A

Target type: Vehicle, Light armored vehicle, Small buildings, Small vessel and ship

Mass: ~ 10kg

Max. Range: 8km(relative height 3.5km, hover)/

13km (relative height 6km)

Guidance type: INS+SLAS (basic type)

INS(data-link)+infrared TV (improved type)

CEP:  $\leq 1\text{m}$

Hit Probability:  $\geq 90\%$

Propulsion: Solid Rocket Motor

Warhead: 3kg blast-fragment warhead

Damage capacity:  $> 20\text{m}$  radius of fragment

intensive kill

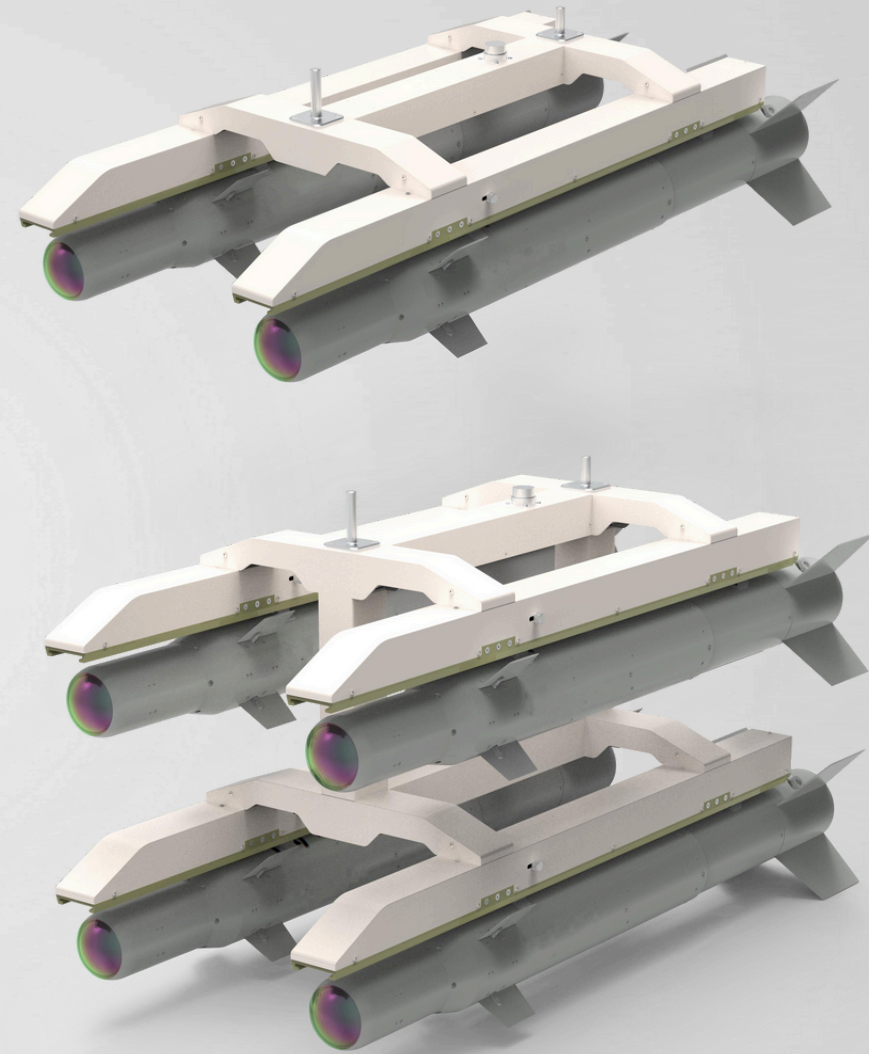
Launch type: Railway launch



# TX-10/10A

## Multi-Purpose Precision Guided Missile

- Anti-interference, GPS not relied, adaptability to combat harsh environment;
- Able to load on fixed-wings & multi-rotor aircraft carrier;
- Light weight, support multi-pack launch;
- Low cost, high cost-effectiveness ratio;
- Two working mode, pre-fire lock & after-fire lock;
- Improved type can achieved “fire and forget”.



# TX-20/25A

Target type: Vehicle, Light armored vehicle, Small buildings, Small vessel and ship

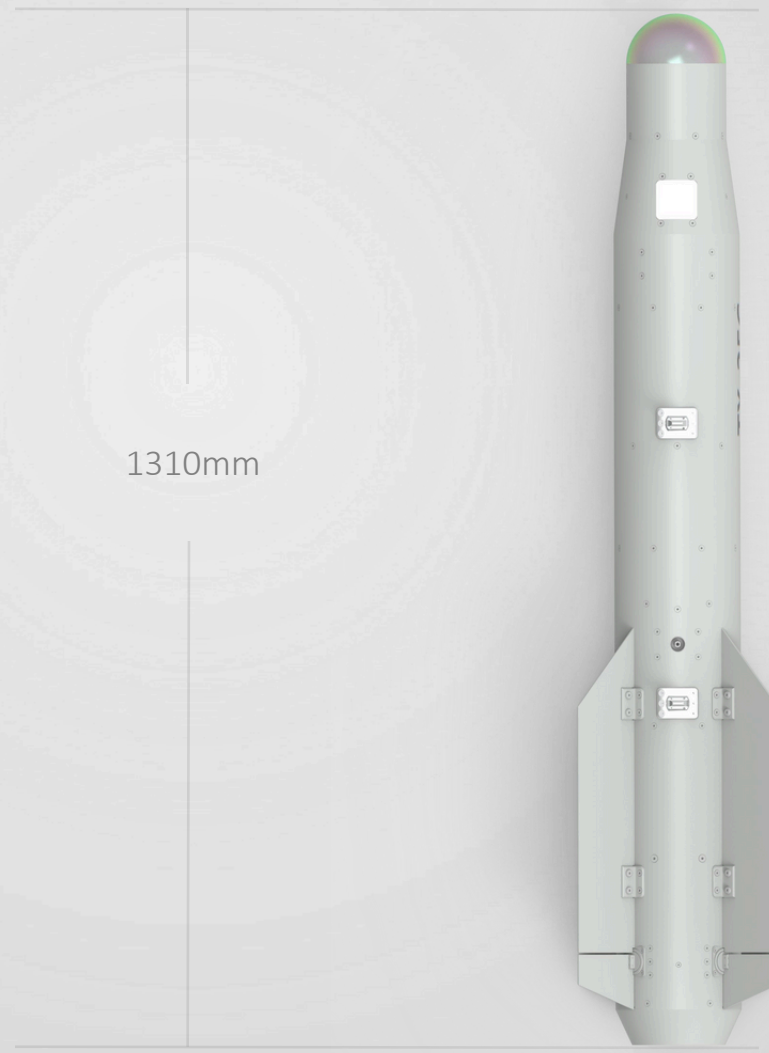
Mass: ~25kg Max. Range: 16km (fixed target) / 18km (moving target, relative height 7km)

Guidance type: INS/GNSS+SALS  
CEP:  $\leq 1m$  Hit Probability:  $\geq 90\%$  Propulsion: Solid Rocket Motor

Warhead: 7.6kg tandem armor-breaking and blasting warhead

Damage capacity:  $\geq 1060mm$  penetrating depth of static armor vertically;  $\geq 80\%$

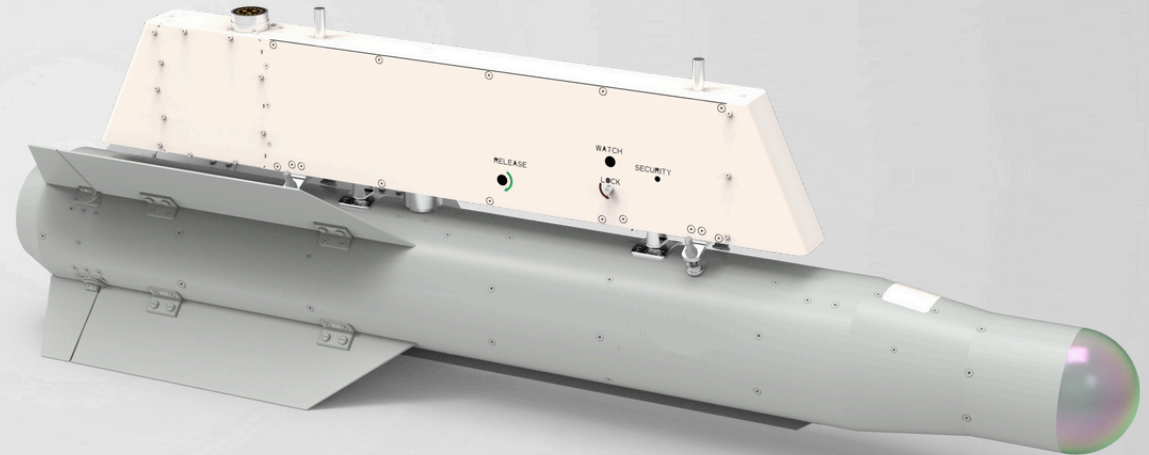
penetration rate of 320mm/68° homogeneous armor target plate with & without reactive armor  
Launch type: Railway launch/Gravity drop



# TX-20/25A

## Multi-Purpose Precision Guided Missile

- Anti-interference, GPS not relied, adaptability to combat harsh environment;
- Support multi-platform launch;
- High precision, excellent damage capacity;
- Low cost, high cost-effectiveness ratio;
- Two working mode, pre-fire lock & after-fire lock.



# TX-20/50A

Target type: Vehicle, Light armored vehicle, Small buildings, Small vessel and ship

Mass: ~50kg

Max. Range: 22km (fixed target) / 18km (moving

target, relative height 7km) Guidance

type: INS/GNSS+SALS

CEP:  $\leq 1\text{m}$

Hit Probability:  $\geq 90\%$

Propulsion: Solid Rocket Motor

Warhead: 28kg blast-fragment warhead/semi-piercing armor warhead

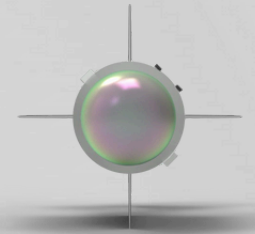
Damage capacity: BFW:  $> 40\text{m}$  radius of fragment

intensive kill

SAPW: penetrate 380mm reinforced concrete

Launch type: Railway launch/Gravity drop

160mm



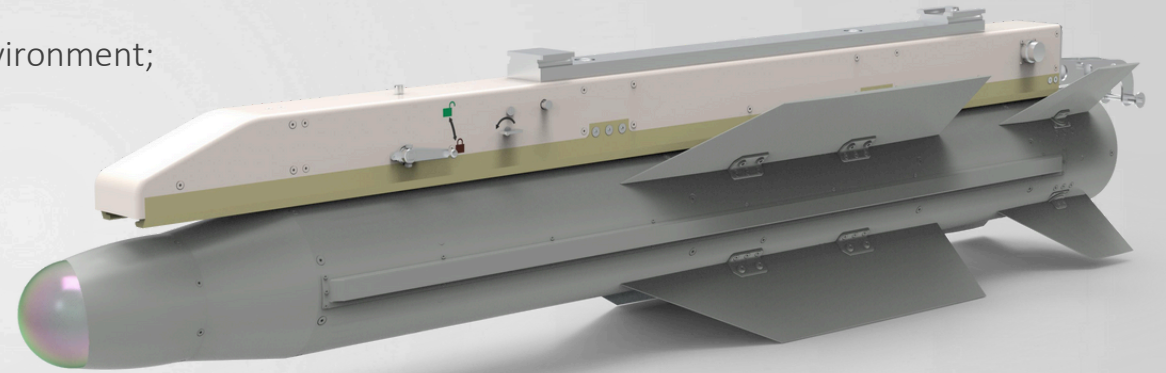
1610mm



# TX-20/50A

## Multi-Purpose Precision Guided Missile

- Anti-interference, GPS not relied, adaptability to combat harsh environment;
- Long range, strong maneuverability, high strike precision;
- Power warhead, excellent damage capacity;
- Compared with similar products ahead, more advanced core tactical & technical indicators and environmental adaptability.

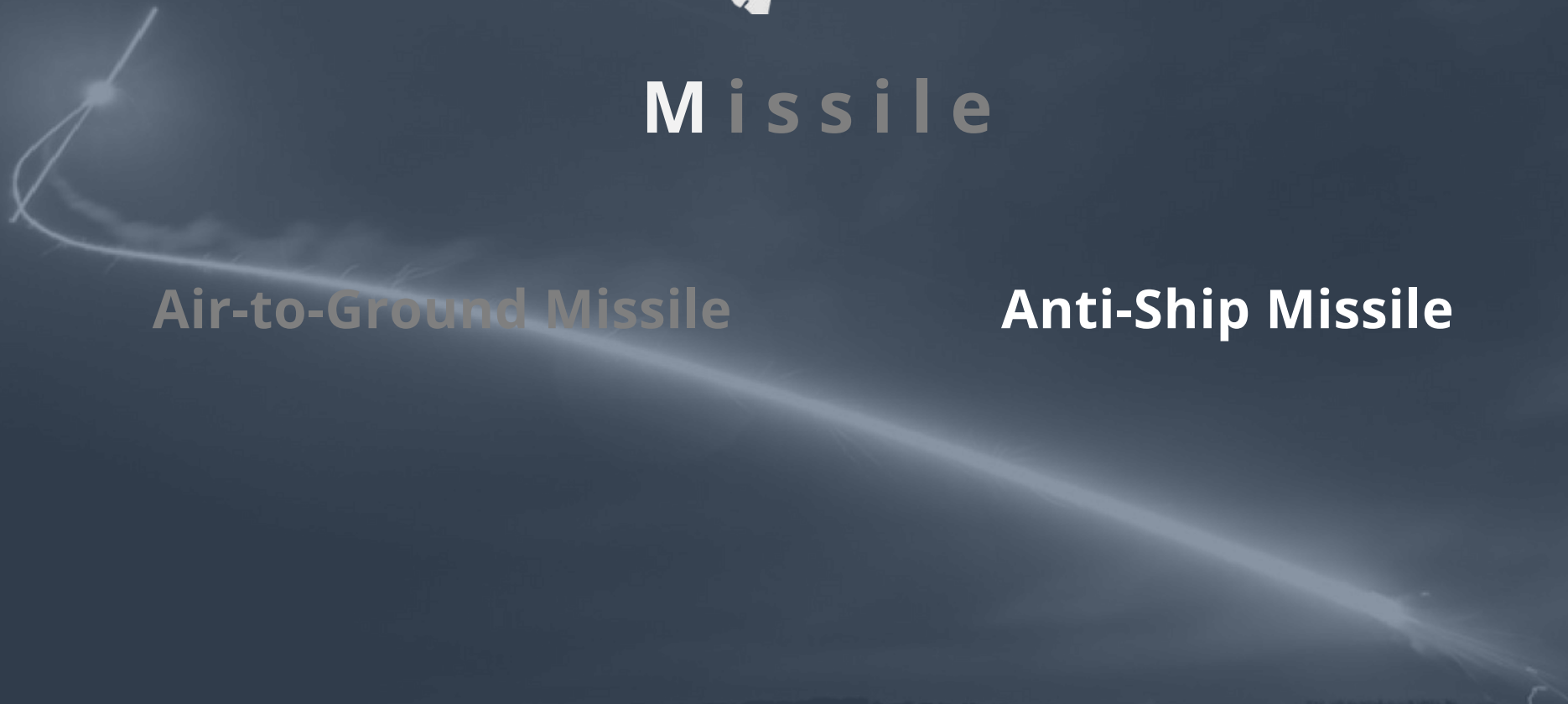




# Missile

**Air-to-Ground Missile**

**Anti-Ship Missile**



# TX-20/75

Target type: Middle and small ship, light armor vehicle, military vehicle, shelter, command station etc

Mass: ~75kg

Max. Range: 18km

Guidance type: INS/GNSS+SALS(basic type)

INS/GNSS+8mm active radar(improved type)

CEP:  $\leq 1\text{m}$

Hit Probability:  $\geq 90\%$

Propulsion: Solid Rocket Motor

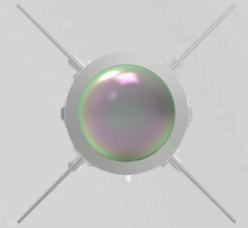
Warhead: 34kg blast-fragment warhead/semi-piercing armor warhead

Damage capacity: BFW:  $> 45\text{m}$  radius of fragment

intensive kill SAPW: penetrate 500mm reinforced concrete

Launch type: From warship/from vehicle

160mm



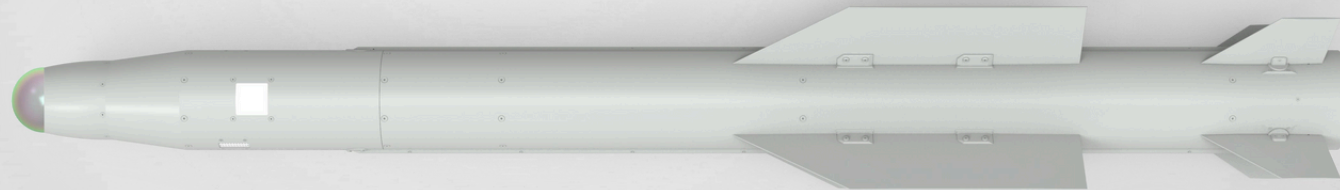
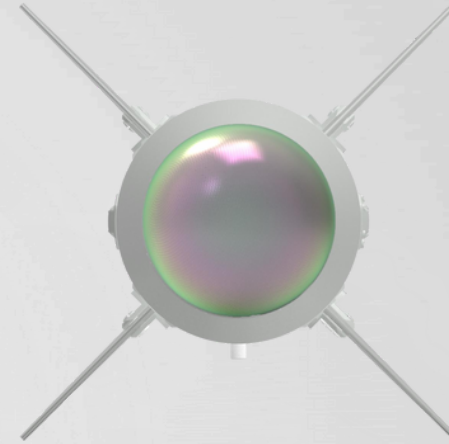
2120mm



# TX-20/75

## Multi-Purpose Precision Guided Missile

- Long range, high precision and low cost;
- Power warhead, excellent damage capacity;
- Improved type with MMW seeker can achieve "fire and forget".



# TX-370

Target type: 1000t-3000t warship

Mass: ~390kg

Max. Range: 120km

Max. speed: 4Ma

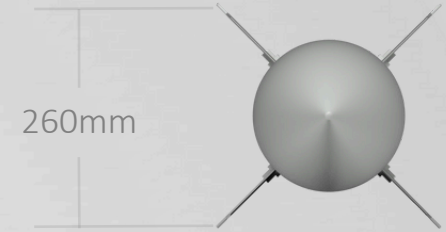
Guidance type: INS/GNSS+8mm MMW

Propulsion: Solid Rocket Motor

Warhead: 95kg SAPW

Fuse: Impact or Delay

Launch type: Vehicle-mounted box launch or ship-borne oblique launch



# TX-370

## Multi-Purpose Precision Guided Missile

- High spatial resolution, strong penetration of smoke and dust, all-weather and all-day combat capability, anti-jamming and anti-stealth capability;
- High cost-effectiveness ratio;
- High precision and long range, capable of precise strikes on targets outside the defense area;
- Modular and generalized design, allowing flexible replacement of warheads or seekers, with strong adaptability;
- After load target coordinates before launch, achieve fire-and-forget capability;
- Low-altitude penetration at the terminal stage.





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