

MINI SAR

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MINI: Small size (324X16X240mm) – Light Weight (4.3Kg)



MULTI MODE: Real time SAR imaging, support GMTI, MMTI & MS



2D SERVO SYSTEM: Radar scanning & moving carrier compensation



PD MODE: Up to 16Km range detection & real time imaging



STRONG ADAPTABILITY: Embedded recorder, own combined navigation, doesn't need any resources from UAV, light weight, small size, integrated Design, strong adaptability to installation



ADAPTED TO A VARIETY OF AIRCRAFT: Such as transportation aircraft (Y12, Cessna 208B), composite wing UAV (multi type), multi-rotor UAV, helicopter, etc.



MULTI INTERFACE: Provides a variety of interfaces, CAN be selected as the control interface, supporting RS232, RS422, LAN, CAN, etc. Real-time SAR image/target data interface, optional synchronous 422 or network port.

VV Polarization Imaging (0.5m Resolution)



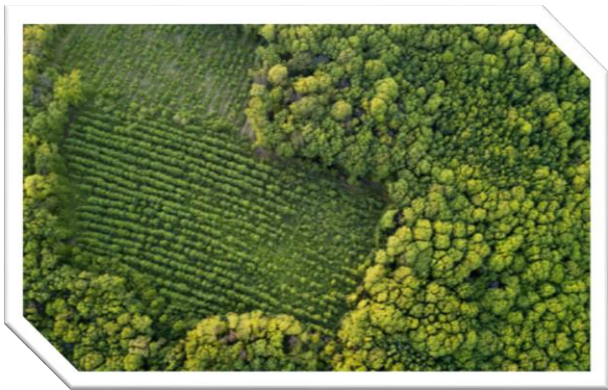
Geomorphological Mapping



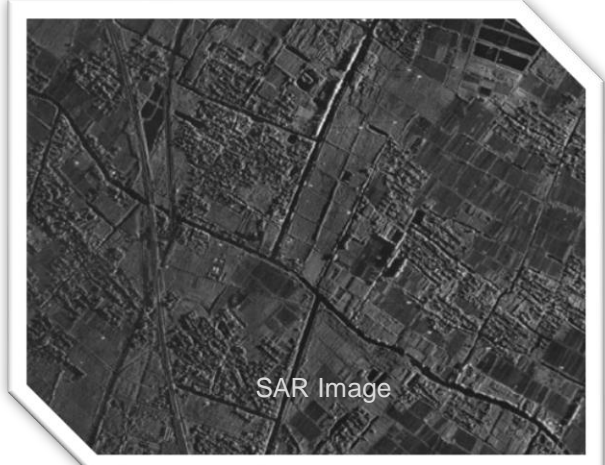
Search & Rescue



Environment Monitoring



VH Polarization Imaging (0.5m Resolution)



Border Surveillance



Agriculture & Wild field Monitoring



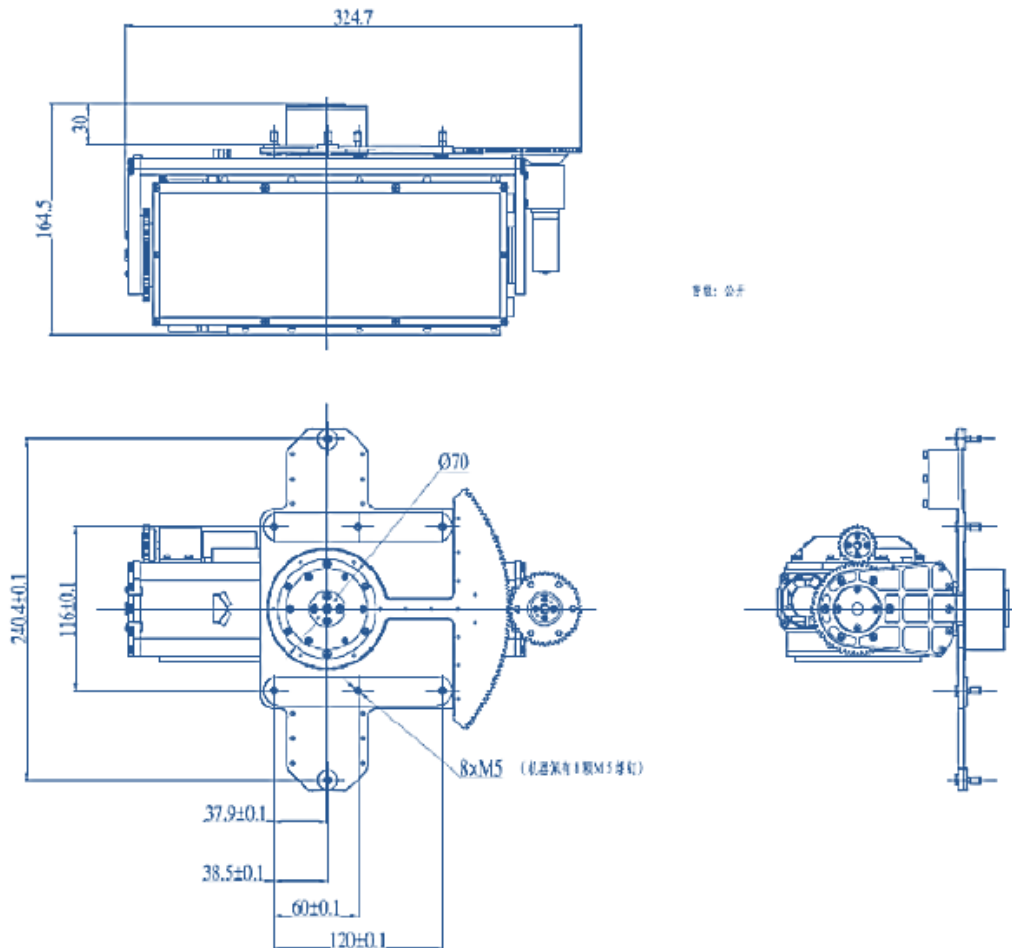
Resources Exploration



Mini SAR

The Mini SAR/MTI radar is an advanced miniaturized and lightweight intelligence reconnaissance and surveillance radar, which can be equipped on all kinds of UAV or drones, real-time acquisition of SAR images, ground moving targets, surface ship targets and other information under all-weather conditions.

The radar uses advanced design technology to optimize detection performance while greatly reducing weight, volume and power consumption.



Mini SAR

Strip SAR Images: It can be used to detect stationary targets in large area.

Focus SAR Images: It can be used for high resolution fine detection of stationary targets in designated areas on the ground.

GMTI: It can be used to detect and track large range of ground moving targets.

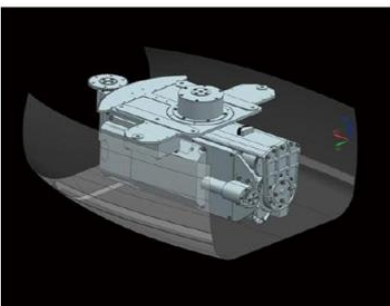
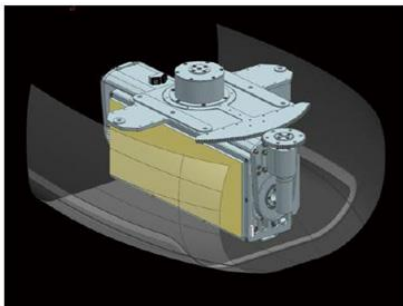
Wide sea surface search: It can be used to search and track ship targets in a wide range of sea surface.

AutoSave: With its own data recording module, image data and original data real-time recording ability

Real-time measurement: Optional inertial measurement equipment, with real-time measurement of aircraft motion parameters.

The function modules of radar such as transmitting, receiving/excitation, signal/-several, servo/antenna, storage and inertial navigation are highly integrated in one LRU, which has good adaptability to installation.

Product Type		Mini SAR/MTI Radar
Power consumption		< 150 W @ 28 VDC
Weight		< 5 Kg
Size		antenna aperture 253mm×100mm (If the installation space allows, the antenna diameter can be increased to improve the detection performance)
Temperature		-30 ° C ~ +50 ° C
Maximum service height		<5000m
Operating frequency		X/Ku (Optional)
Radar polarization mode		Horizontal or vertical options
Azimuth scanning range		-90°±30°and +90°±30° (Depending on the installed space, the range can be extended to 360°)
SAR Imaging resolution		0.3m/0.5m/1.0m/3.0m options
Imaging ability		Real-time imaging on board, maximum output pixel up to 8K×8K
GMTI ability	Minimum detectable radial velocity	15km/h (Vehicle speed >100km/h)
	Detection Range	<12km (Target RCS <20m2)
Wide sea surface search ability	target RCS <3000m2	<30km (target RCS <3000m2)
	target RCS <100m2	<15km (target RCS <100m2)
Data storage capacity		<2TB



Mini SAR Highlight Features

1. Embedded recorder, own combined navigation, doesn't need any resources from UAV. Light weight, small size, integrated design, strong adaptability to installation.
2. Multi-mode: Dual polarization, full polarization. Support GMTI, MMTI and MS.
3. Adapted to a variety of aircraft, such as transport aircraft (Y-12, Cessna 208B), composite wing UAV (Multi-type), multi-rotor UAV, helicopter (Robinson R44)
4. Small size, easy to do installation.
5. Two-dimensional servo system, strong adaptability for harsh environment, especially in turbulence.
6. PD mode for Mini SAR detection range up to 15KM.
7. Provides a variety of interfaces, CAN be selected as the control interface, supporting RS232, RS422, LAN, CAN, etc. Real-time SAR image/target data interface, optional synchronous 422 or network port.
8. Real-time imaging

