

SKYFEND

DPH100

Mid-range active phased array radar

DPH100 is an X-band pulse doppler active electronically scanned array (AESA) radar, providing all-weather high-precision detection and positioning capability for low-altitude flying objects.

It meets hemispherical detection requirements in defense systems through different installation methods (quad-panel radar, single radar with pan positioner), ensuring radar coverage without blind spots. DPH100, with its multi-mode configuration, is suitable for various operational scenarios and can be easily integrated into fixed platforms as per operational needs.



ADVANTAGES OF THE PRODUCT

- 2D phased array radar design provides high-precision drone detection data in complex environments.
- In C-UAV (Counter Unmanned Aerial Vehicle) mode, it achieves detection distances of over 5 km for drones with RCS of 0.01 m².
- Capable of tracking hundreds of targets simultaneously.
- The radar system supports two methods for achieving 360° protection in the horizontal airspace: one through horizontal mechanical scanning and the other using a quad-panel configuration.



DISTINCTIVE FEATURES



Strong Environmental Adaptability

Equipped with all-weather detection capability, it can track and identify drones even in adverse conditions such as rain, snow, strong winds, and dust.



Hemispherical Monitoring

The radar provides comprehensive monitoring and detection capabilities, effectively covering the airspace with a panoramic view. It detects without blind spots, enhancing the overall reliability and comprehensiveness of the defense system.



Software Customization

Radar beams can be defined via software, making it suitable for various mission scenarios. It can detect drones, humans, vehicles and other targets in different modes.



Guidance Capability

It offers high-precision target positioning and can guide electro-optical or other countermeasure devices to effectively interfere with flying objects.

SPECIFICATIONS

DPH100

Mid-range active phased array radar

Parameters	Indicators	
Operating status	Two-dimensional phased array scanning mode	Horizontal mechanical scanning, two-dimensional phased-array scanning
Frequency band	X-band	
Operating frequency band	9.2GHz~9.5GHz	
Maximum signal bandwidth	15MHz	
Maximum antenna power	128W	
Detection range	≥5Km(Drone,RCS:0.01m2)	
Radar range	13km	
Blind zone	≤200m	
Field of View (FOV)	Azimuth:0°~90°, Elevation:0~75°	Azimuth:0°~360°, Elevation:0~75°
Target capacity	≥200	
Speed range	1~100m/s (Software-adjustable)	
Accuracy	Distance accuracy: <10m, Range resolution: 15m , Azimuth angle accuracy:<0.5°, Pitch angle accuracy: <0.5°, Velocity accuracy: ≤0.6m/s	
Target update rate (Data rate)	≤6s(Configurable) , In azimuth mechanical scanning method <3s TAS Mode (<0.5s) , TWS Mode (<6s)	
Size	<357*345*145mm	
Weight	<15Kg	<20Kg
Power supply	AC220V	
Interface	Ethernet Port	
Power consumption	<400W	<500W
Operating temperature range	-40°C~+55°C	
Storage temperature range	-45°C~+60°C	
Cooling method	Active cooling	
Protection rating	IP66	
MTBF	≥200 hours	≥200 hours
Mounting method	Portable、Fixed、Vehicle-mounted	