

OA-LITE

OBSTACLE AVOIDANCE RADAR

SHORT RANGE - 50M



PRODUCT OVERVIEW

The OA-Lite radar is engineered to comprehensively enhance flight safety in complex environments. Its core design focuses on precise detection and efficient obstacle avoidance.

Whether in urban environments, forested wilderness, poor lighting, or even adverse weather conditions, the OA-Lite operates reliably, accurately identifying a wide variety of obstacles and enabling safe autonomous flight.

APPLICATIONS

- Precision Agriculture
- Last Mile Delivery
- Construction
- Utility / Inspection
- Emergency Services
- Forestry / Surveying
- Public Safety



REAL-TIME DYNAMIC TRACKING

Track multiple targets simultaneously in its FOV of 60 x 60 degrees. Monitor surrounding obstacles in real time and continuously capture their target distance.



ADAPTIVE ANGLE ADJUSTMENT

With a wide pitch-plane angle, the radar can change with the aircraft's vertical angle to adapt to the fluctuations in the drone's flight posture and improve obstacle avoidance reliability.



FULL COVERAGE

Using the most advanced detection technologies, the maximum detection distance can reach 50 meters. For ultrafine targets, such as power lines, the effective detection distance is 15 meters.

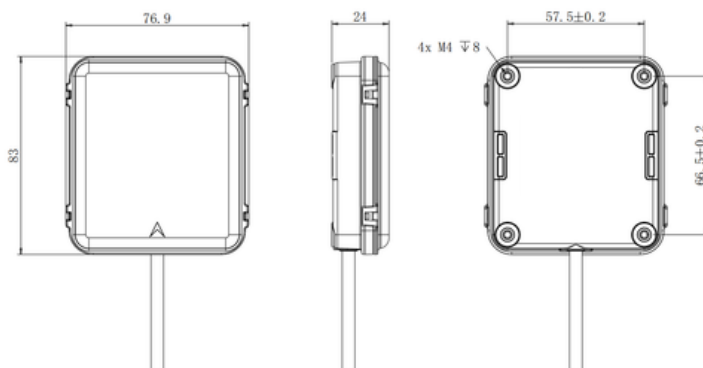


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PRODUCT SPECIFICATIONS

Frequency Band	60 GHz
Field of View - Horizontal	60° x 60°
Field of View - Elevation	15° x 15°
Angle Precision	1°
Detection Range	15 m for ultra-fine targets (e.g., Powerlines) 50 m Instrument Range
Distance Resolution	≤1 m
Distance Accuracy	± 0.1 m
Power Consumption	≤3 W*
Operating Voltage	5-16 V
Update Rate	10 Hz*
Bandwidth	≤4 GHz*
Operating Temperature	-40°C ~ 65 °C
Dimensions	83 x 77 x 24 mm
Weight	<100 g*
IP Rating	IP67
Interface	UART TTL, CAN
Maximum Speed	15 m/s

*: Values are subject to slight change



Units: mm

