

AIRBORNE ALTIMETER

VALLUS

24GHz low-power FMCW radar provides accurate altitude measurements above terrain for drones. It enables instant and reliable height referencing for enhanced flight safety and situational awareness.

CUTTING EDGE TECHNOLOGY

By adopting advanced low-power FMCW (frequency modulated continuous wave) technology, this altimeter provides reliable and accurate altitude information for drones with a detection range of up to 3,300ft above terrain.

AI EMPOWERED ALGORITHM

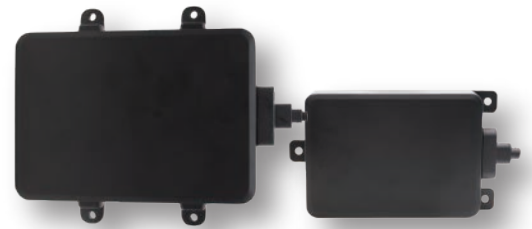
The AI-empowered algorithm facilitates the capability of target clustering and increases environmental awareness. The altimeter intelligently adapts to its environment to minimize false alerts. It delivers instant and reliable height reference for the drones to enhance flight safety and situational awareness.

EASY INTEGRATION

The modular design and user-friendly interface make the altimeter easy to deploy and use. The open-architecture communication protocols offers a seamless integration into your current systems.

24/7 PROTECTION IN ALL CONDITIONS

The altimeter is immune to many environmental conditions, such as light, rain, dust, fog, and smoke. With a built-in, industry-certified rugged design, it ensures stable performance and continuous, all-weather protection even in the harshest environments.



KEY BENEFITS:

- Frequency: 24GHz
- Centimeter-level accuracy in altitude measurements
- Detection range up to 3,300ft above terrain
- Wide coverage
- Compact
- Lightweight
- Low power
- Affordable and easy to deploy
- Reliable system to enhance flight safety in all-weather conditions

AIRBORNE ALTIMETER SPECIFICATIONS

Model	AXDXM24A1-5T	AXDXM24A1-2H	AXDXM24A1-5H	AXDXM24A1-1K
Detection and accuracy				
Max dection range	164 ft (50 m)	650 ft (200m)	1,700 ft (500m)	3,300 ft (1,000m)
Range accuracy	± 0.8 in (20mm)	± 0.8 in (20mm)	±2 in (50mm)	±2 in (50mm)
Maximum detectable velocity	up to 134 MPH (60m/s)			
Field of view	± 24° (horizontal), ±18° (vertical)			
Radar and performance				
Radar type	Frequency Modulated Continuous Wave (FMCW)			
Frequency band	K Band (24GHz)			
Power requirement				
Power supply	DC 4.5~28 V	DC 4.5~28 V	DC 7~24 V	DC 7~24 V
Power consumption	1.5W	1.5W	2W	2W
Network				
Protocols	MAVLink / DroneCAN /ARLink (Selectable)			
Communication interface	UART (TTL) / CAN			
Flight controller	APM (ArduPilot Mega) / PX4 (PX4 Autopilot)			
Refresh rate	10~45Hz			
Environmental				
IP rating	IP67			
Working temperature	-40°F ~ +158 °F (-40°C ~ +70°C)			
Dimension and weight				
Dimension	4.5*2.6*0.7 in (113.2*66*16.5mm)	4.5*2.6*0.7 in (113.2*66*16.5mm)	5.6*3.2*0.7 in (141.5*82*18mm)	5.6*3.2*0.7 in (141.5*82*18mm)
Weight	0.22 lb (99 g)	0.22 lb (99 g)	0.35 lb (160g)	0.35 lb (160g)