AINSTEIN

GENIUS IN RADAR

US-D1 PRO

RADAR ALTIMETER

MID RANGE - 120 m

PRODUCT OVERVIEW

The US-D1 Pro is engineered for precise altitude control up to 120m. This next generation radar was purpose-built as a high-performance, mid-range altimeter that offers both airworthiness compatibility and affordability.

The US-D1 Pro delivers extended range, increased certification compliance, and enhanced environmental resilience - setting a new standard for radar altimetry.

APPLICATIONS

- UAM / AAM
- VTOL / eVTOL
- Last Mile Delivery
- Construction
- Emergency Services
- Utility / Inspection
- Forestry / Surveying
- Public Safety

AEROSPACE-GRADE DESIGN

Designed to DO-160, DO-178, DO-254 and IP69K standards, the US-D1 Pro is ideal for certified applications and airworthiness campaigns.

ALL-WEATHER

Ainstein's radar-based altimeters ensure the utmost reliability and precision in all-weather, any light, and every time.

EXTREME PRECISION

Superior accuracy of ±0.1 m at low altitudes make the US-D1 Pro ideal for Vertical Take Off and Landing (VTOL) applications.

AINSTEIN AEROSPACE

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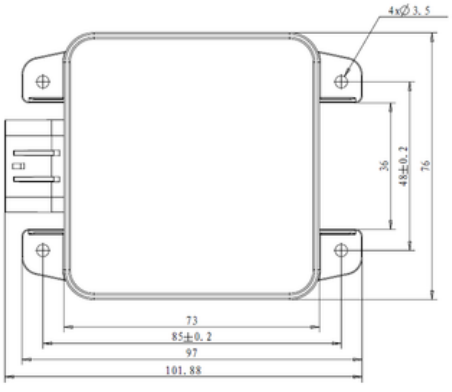
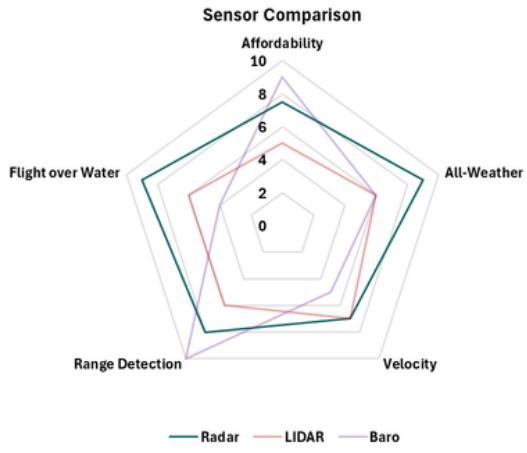
US-D1 PRO
PRODUCT SPECIFICATIONS

Frequency	24 GHz
Field of View	± 20° Azimuth ± 20° Elevation
Altitude Range	Multi-Rotor: 0.5 - 120 m Fixed-Wing/VTOL: 0.7 - 120 m
Altitude Precision	± 0.1 m (@ ≤ 10 m) 1% (@ > 10 m)
Power Consumption	3.5 W
Operating Voltage	9-16 V
Update Rate	20 Hz
Bandwidth	210 MHz
Operating Temperature Range	-40 °C ~ 85 °C
Dimensions	101.8 x 76 x 24.7 mm
Weight	140 g
IP Rating	IP69K
Interface	DroneCAN, CAN
Aircraft Type	Multi-Rotor, Fixed-Wing/VTOL
Certifications	Designed to DO-160, DO-178, and DO-254 standards



Units: mm



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