

# **LR-D1 PRO** RADAR ALTIMETER

LONG RANGE - 500m

# **RELIABILITY ALWAYS**

The LR-D1 Pro utilizes a dual radar antenna design, making the altimeter ideal for takeoff, landing, VTOL, and high-altitude maneuvers. Through the 24 and 60 GHz output frequencies, users can experience a new level of altitude accuracy and confidence.

## **APPLICATIONS**

- Tactical
- Aerial Target
- Cargo Vehicles
- Small rotary
- VTOL/eVTOL
- Recon & Surveillance



#### FIRST DUAL-FREQ. RAD ALT

The LR-D1 Pro is the only commercially available dual-band radar altimeter. Through its algorithm it offers a seamless transition b to offer high accuracy at all altitudes



#### ALL-WEATHER

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



#### PURPOSE BUILT / RUGGED

The LR-D1 Pro is tested to a sine vibration of 15gs and a half sine shock of 100gs. Additionally, its IP67-designed enclosure makes it compatible with all environments.

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# **PRODUCT SPECIFICATIONS**

60 GHz     Field of View   43° Azimuth     30° Elevation   30° Elevation     Altitude Range   0.3 - 500 m     Altitude Precision   ±0.075m (>5m)     ±0.015m (<5m)   ±0.015m (<5m)     Power Consumption   13 W     Operating Voltage   10 - 30 V     Update Rate   66 Hz     Bandwidth   250 MHz     Operating Temperature Range   -40°C - 60°C     Dimensions   174mm x 134mm x 37.5mm     Weight   685g     IP Rating   IP67     Interface   UART TLL, CAN, R232, R5422, R5485	Frequency	24 GHz
30° Elevation     Altitude Range   0.3 - 500 m     Altitude Precision   ±0.075m (>5m)     ±0.015m (<5m)		60 GHz
Altitude Range   0.3 - 500 m     Altitude Precision   ±0.075m (>5m)     Power Consumption   13 W     Operating Voltage   10 - 30 V     Update Rate   66 Hz     Bandwidth   250 MHz     Operating Temperature Range   -40°C - 60°C     Dimensions   174mm x 134mm x 37.5mm     Weight   685g     IP Rating   IP67     Interface   UART TLL, CAN, R232, R5422, R5485     Status   133 status     Status   13 status     Status   13 status     Status   13 status     Status   13 status     Status   14 status     Status   14 status     Status   13 status     Status   13 status     Status   14 status	Field of View	43° Azimuth
Altitude Precision   ±0.075m (>5m)     Power Consumption   13 W     Operating Voltage   10 - 30 V     Update Rate   66 Hz     Bandwidth   250 MHz     Operating Temperature Range   -40°C - 60°C     Dimensions   174mm x 134mm x 37.5mm     Weight   685g     IP Rating   IP67     Interface   UART TLL, CAN, R232, R5422, R5485     Image: State 0.5   Sensor Comparison     Image: State 0.5   Sensor Comparison <td< td=""><td></td><td></td></td<>		
±0.015m (<5m)	Altitude Range	0.3 - 500 m
Power Consumption 13 W Operating Voltage 10 - 30 V Update Rate 66 Hz Bandwidth 250 MHz Operating Temperature Range -40°C - 60°C Dimensions 174mm x 134mm x 37.5mm Weight 685g IP Rating IP67 Interface UART TLL, CAN, R232, R5422, R5485 Sensor Comparison Piere 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Altitude Precision	
Operating Voltage 10 - 30 V   Update Rate 66 Hz   Bandwidth 250 MHz   Operating Temperature Range -40°C - 60°C   Dimensions 174mm x 134mm x 37.5mm   Weight 685g   IP Rating IP67   Interface UART TLL, CAN, R232, R5422, R5485		
Update Rate 66 Hz   Bandwidth 250 MHz   Operating Temperature Range -40°C - 60°C   Dimensions 174mm x 134mm x 37.5mm   Weight 685g   IP Rating IP67   Interface UART TLL, CAN, R232, RS422, RS485	Power Consumption	13 W
Bandwidth 250 MHz   Operating Temperature Range -40°C - 60°C   Dimensions 174mm x 134mm x 37.5mm   Weight 685g   IP Rating IP67   Interface UART TLL, CAN, R232, R5422, R5485	Operating Voltage	10 - 30 V
Operating Temperature Range   -40°C - 60°C     Dimensions   174mm x 134mm x 37.5mm     Weight   685g     IP Rating   IP67     Interface   UART TLL, CAN, R232, RS422, RS485     Image Detection   10°C - 60°C	Update Rate	66 Hz
Dimensions   174mm x 134mm x 37.5mm     Weight   685g     IP Rating   IP67     Interface   UART TLL, CAN, R232, RS422, RS485     Image: Comparison of the second se	Bandwidth	250 MHz
Weight 685g   IP Rating IP67   Interface UART TLL, CAN, R232, RS422, RS485	Operating Temperature Range	-40°C - 60°C
IP Rating IP 67 Interface UART TLL, CAN, R232, RS422, RS485 Sensor Comparison 174 ±0.5 174 ±0.5 174 ±0.5 194 194 194 194 194 194 194 194	Dimensions	174mm x 134mm x 37.5mm
Interface UART LL, CAN, R232, R5425, R545	Weight	685g
	IP Rating	IP67
	Interface	UART TLL, CAN, R232, RS422, RS485
$ \begin{array}{c} 174 \pm 0.5 \\ 184 \\ 134 $	$35 \pm 0.5$	
Image: Windows 3   Image: Windows 1   Image: Windows 1 <td< td=""><td></td><td>•</td></td<>		•
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Flight over Water Range Detection Range Detection Rang	162	
Image: Detection Image: Detection Image: Detection Image: Detection   Image: Detection Image: Detection Image: Detection Image: Detection	13461.56884THER	Flight over Water 4 All-Weather
Radar LIDAR — Baro		
		Range Detection Velocity
		RadarBaro
	Unit:mm	

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