

UAV ALTITUDE SENSING

BORADAR-50

Millimeter-Wave Altimeter Radar

A compact 24 GHz FMCW radar altimeter for reliable height-above-ground measurement in UAV and autonomous flight applications.



KEY PERFORMANCE

50 m

MAX. RANGING DISTANCE

±2 cm

TYP. RANGING ACCURACY

50 Hz

MEASUREMENT
UPDATE RATE

24 GHz

FMCW RADAR

UART

DATA INTERFACE

95 g

DEVICE WEIGHT

TECHNICAL SPECIFICATIONS

BORADAR-50 / 24 GHz FMCW ALTIMETER RADAR

RADAR & MEASUREMENT

Transmit frequency	24.00–24.20 GHz
Modulation	FMCW
Ranging distance	0.1–50 m
Ranging accuracy	±0.02 m (typ.)
Update rate	50 Hz
Output power (EIRP)	25 dBm (typ., adjustable)

POWER, INTERFACE & MECHANICAL

Supply voltage	5–20 V DC (12 V typ.)
Power consumption	1.5 W typ. (@5 V DC, 25°C)
Communication interface	Micro USB / UART
TX beamwidth (–6 dB)	28° azimuth / 18° elevation
Weight	<100 gram
Dimensions (L × W × H)	75 x 138 x 21 mm

TYPICAL APPLICATIONS UAV altitude sensing • Terrain following • Low-altitude navigation