

Reach RS4 Pro

EMlid

Datasheet

All-band RTK GNSS receiver with dual cameras

- ⌚ AR stakeout
- ⌚ Measurements from photos
- ⌚ Centimeter precision under canopy
- ⌚ Tilt compensation
- ☒ L1/L2/L5/L6
- ☒ 2W dual-band radio



Reach RS4 Pro is a high-precision all-band RTK GNSS receiver with dual cameras that open up new ways to work. Use augmented reality stakeout to see points and lines overlaid on site, speeding up layout and reducing errors. With photo-based measurement, capture hard-to-reach points on building facades, behind fences, or across busy roads — no total station or hazardous setup required. RS4 Pro is ideal for surveying, construction, utilities, roadworks, and any job where you need centimeter accuracy and visual guidance.

Specifications

For more information, visit



Mechanical

Dimensions	128.6 x 128.6 x 99.3 mm (5.06 x 5.06 x 3.91 in)	Emlid radio*		
Weight	920 g (2.03 lb)	LoRa radio	Frequency range Distance	868/915 MHz Up to 8 km
Operating t°	-40 to +65 °C (-4 to 149 °F)	UHF radio	Frequency range	410 - 470 MHz
Ingress protection	IP68		Protocols Modulation type	TRIMTALK 450S** GMSK

Positioning

Precision	Static	H: 7 mm + 1 ppm V: 14 mm + 1 ppm		
	PPK	H: 5 mm + 0.5 ppm V: 10 mm + 1 ppm		
	RTK	H: 7 mm + 1 ppm V: 14 mm + 1 ppm		
Convergence time		~5 s typically		
Tilt compensation		RTK + 2mm + 0.3 mm/°	Wi-Fi	802.11a/b/g/n
Signal tracked		GPS: L1C/A, L2C, L5 GLONASS: L1OF, L2OF Galileo: E1-B/C, E5a, E6 BeiDou: B1I, B1C, B2a, B3I QZSS: L1C/A, L1C/B1I, L2C, L5 NavIC: L1-SPS Data, L5-SPS	Bluetooth	Bluetooth 5.1 (BR/EDR + LE)
Number of channels		672	Ports	RS-232, USB Type-C
Update rate		Up to 10 Hz	Data protocols	Corrections Position output NTRIP, RTCM3 NMEA, LLH/XYZ
			Data logging	RINEX, NMEA, LLH/XYZ, UBX
			Internal storage	16 GB

Electrical

Autonomy	16 hrs as RTK rover with tilt, 22 hrs of logging	Image sensors	1/2.6 in, CMOS, global shutter, Full HD
Battery	Li-Ion 5000 mAh, 7.2 V, 36 Wh	Field of view	Front camera H: 64.6°, V: 42.8° Bottom camera H: 63°, V: 42°
Charging	USB Type-C (PD): 5V—3A, 9V—3A, 12V—3A, 15V—3A	Video frame rate	25 fps

*The exact power and the available frequency range are subject to regional regulations. **TRIMTALK is a trademark of Trimble Inc.

Imaging