

Reach RS4 Pro

EMLID

All-band RTK GNSS receiver with dual cameras and centimeter precision

Next-level stakeout with augmented reality and measuring from photos

📷 Two Full-HD cameras

📶 672 channels

📐 Next-gen tilt compensation

🔋 16 hours on one charge

📶 L1/L2/L5/L6



Dual camera

Stake out faster with AR

With the RS4 Pro, stakeout becomes visual. Rather than simply following coordinates on a map, your designs are directly overlaid on the real world, clearly showing where to place stakes.

Crews can work faster with AR guidance, even on complex construction sites and roadworks.

Measure from images

Even if you can't put the pole on that point, you can still measure it with your RS4 Pro. Use the cameras to measure building facades, areas behind fences, across busy roads and any other inaccessible points. Save time setting up a total station and avoid hazardous areas.



Key features

Cm-level accuracy, even under canopy

672 channels and full-band reception deliver reliable centimeter precision, even under canopy or in urban areas.

Quick release mount

A secure, backlash-free connection to the survey pole ensures consistent accuracy in every setup.

Dual-band radio and NTRIP

915 MHz LoRa for licence-free connections, and 450 MHz UHF for a licensed operation of up to 2W, to send and receive corrections. NTRIP support for seamless work with VRS and CORS networks.

Next-gen tilt compensation

Work freely with unlimited pole tilt—no calibration needed, no magnetic interference. Activates with just a couple of moves and remains stable throughout the survey.

16 hours on one charge

Work all day without interruption—recharge via USB-C or power bank.

Built to last

A magnesium alloy body, IP68 protection, and temperature range from -40 to +65 °C make RS4 Pro field-ready anywhere.

Emlid Flow: keep the field and the office in sync



iOS / iPadOS



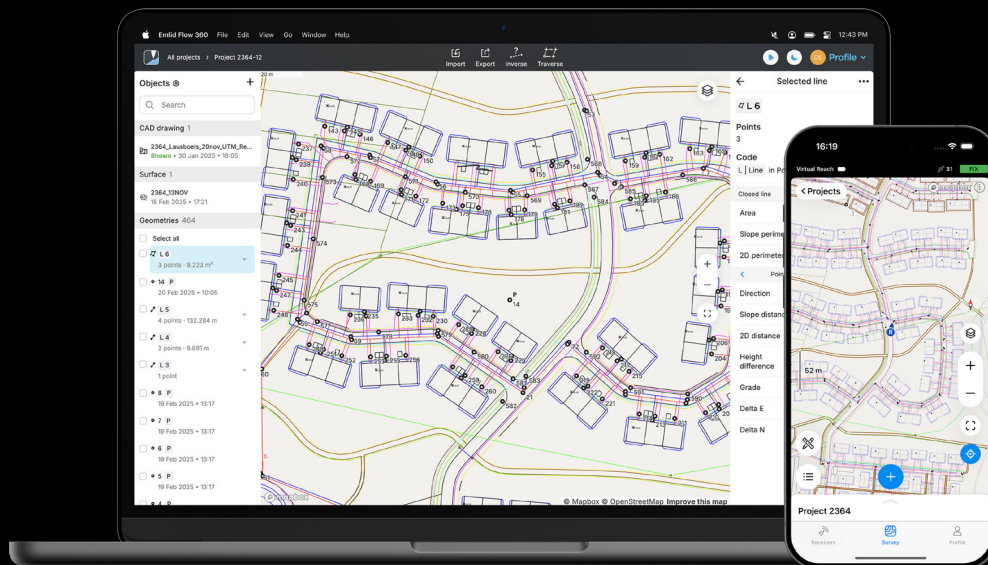
Android



Any browser

Emlid Flow is a mobile app designed for fieldwork, offering instant sync with the cloud-based Emlid Flow 360 platform.

Ensure that the whole team is working with the latest data and monitor progress in real time.



Execute projects on site

Lay out CAD designs

Measure slopes and cut & fill

Gather topo data and elevations

Mark out centerlines, offsets, and curves

Stake out boundaries

Coordinate your team

Invite team members, share projects and manage access

Monitor real-time progress

Exchange data with instant sync

Specifications

Mechanical

Dimensions	128.6 x 128.6 x 99.3 mm
Weight	920 g
Operating t°	-40 to +65 °C
Ingress protection	IP68

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/°	
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	
Number of channels	672	
Update rate	Up to 10 Hz	

Electrical

Autonomy	16 hrs as RTK rover with tilt, 22 hrs of logging
Battery	Li-Ion 5000 mAh, 7.2 V, 36 Wh
Charging	USB Type-C (PD): 5V—3A, 9V—3A, 12V—3A, 15V—3A

Connectivity

Emlid radio*		
LoRa radio	Frequency range	868/915 MHz
	Distance	Up to 8 km
UHF radio	Frequency range	410 - 470 MHz
	Protocols	TRIMTALK 450S**
	Modulation type	GMSK
LTE modem	Regions	Global
	Bands	FDD-LTE: 1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 26, 28 TD-LTE: 38, 39, 40, 41 UMTS (UHPS/FDD): 1, 2, 5, 8
		Quad-band, 850/1900, 900/1800 MHz
	SIM card	Nano-SIM
Wi-Fi	802.11a/b/g/n	
Bluetooth	Bluetooth 5.1 (BR/EDR + LE)	
Ports	RS-232, USB Type-C	
Data protocols	Corrections	NTRIP, RTCM3
	Position output	NMEA, LLH/XYZ
Data logging	RINEX, NMEA, LLH/XYZ, UBX	
Internal storage	16 GB	

Imaging

Image sensors	1/2.6 in, CMOS, global shutter, Full HD	
Field of view	Front camera	H: 64.6°, V: 42.8°
	Bottom camera	H: 63°, V: 42°
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.

Learn more at emlid.com

