

# 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)
Weight	920 g (2.03 lb)
Operating t°	-40 to +65 °C (-4 to 149 °F)
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.