



The TGS GNSS EQ1 RTK is a powerful geodetic GPS solution designed to provide high-precision measurements with the added convenience of mobile app integration. Equipped with Real-Time Kinematic (RTK) technology, this device offers centimeter-level accuracy for land surveying, construction, and geospatial data collection, all while being seamlessly connected to the GIS Survey Mobile app for remote operation.

Integrated with GIS Survey Mobile App

The TGS GNSS EQ1 RTK pairs seamlessly with the GIS Survey Mobile app, offering advanced functionality and real-time control from your mobile device:

- Remote Configuration: Adjust device settings, start and stop surveys, and monitor real-time data collection directly from the app.
- Live Data Sync: View and save geospatial data on the go, with immediate synchronization to your GIS system for further analysis and processing.
- Streamlined Workflows: Manage multiple projects, export data in various formats, and integrate with GIS platforms for faster decision-making and reporting.













Key Features



Multi-Constellation GNSS Support

The EQ1 supports GPS, GLONASS, and Galileo, BeiDou satellite constellations, providing enhanced signal reception and ensuring fast and reliable positioning in various environments.



Centimeter-Level Accuracy:

Achieve real-time positioning accuracy with RTK technology, ensuring precise and reliable data collection for even the most demanding geodetic tasks.



Rugged and Field-Ready

Designed for harsh conditions, the EQ1 RTK is built with a durable, IP67-rated casing to withstand dust, and shocks, ensuring water, dependable performance challenging field environments.



Mobile Connectivity via GIS Survey Mobile

Control your TGS GNSS EQ1 RTK directly from the GIS Survey Mobile app, transforming your smartphone or tablet into a powerful remote interface. Easily manage settings, initiate surveys, and collect data without the need for additional hardware.



Real-Time Data & Post-Processing

Whether using RTK for instant results or PPK for post-processing precision, the TGS GNSS EQ1 RTK offers flexibility to suit any project requirement.



Long Battery Life

With extended battery life, the TGS GNSS EQ1 RTK allows for continuous operation throughout the day, minimizing downtime and ensuring productivity.

Why Choose TGS GNSS EQ1 RTK?

The TGS GNSS EQ1 RTK offers unparalleled precision, rugged durability, and the convenience of mobile integration. By connecting with the GIS Survey Mobile app, professionals can control, monitor, and collect high-accuracy data with ease—directly from their smartphone or tablet. This advanced GPS system is the ideal choice for those seeking to combine accuracy, efficiency, and flexibility in their geospatial projects.







Technical Specification

GNSS Signal	Number Of Channel	1507
	BDS-2	B1I, B2I,B3I
	BDS-3	B1I, B1C, B2a, B2b (PPP), B3I
	GPS	L1 C/A, L1C, L2, L5
	GLO	G1,G2
	GAL	E1,E5a, E5b, E6*
	QZSS	L1C/A, L1C, L2, L5, L6*
	NavIC (IRNSS)	L5
	SBAS*	L1C/A
Data	Data Format	CMR, CMR+, RTCM 2.x, RTCM 3.x
	Data Output	NMEA-0183, RINEX, TXT, TGS
	Data Update GNSS Observation	Up to 50Hz
	Data Update GNSS Position Result	5Hz
	Cold Start	<30 s
	Hot Start	< 5s
Communication	Bluetooth	V4.0
	Wifi	802.11 a/b/g/n/ac
	Storage	32 GB
	Internal Radio	410~470MHz
	Data cabel	RS232
Indicator	Led Indicator	Battery, Signal, Status, Data Record
	Buzzer	Data Record
	Bar Battery	Power status
Positioning Performance	Real Time Kinematic	Horizontal Positioning Accuracy 10m +1 ppm (RMS) Vertical
		Positioning Accuracy 15 mm +1 ppm (RMS)
	High-Precission Static	Horizontal Positioning Accuracy 5 mm +1 ppm (RMS) Vertical Positioning Accuracy 10 mm +1 ppm (RMS)
	Single Point	Horizontal Positioning Accuracy 1.5 m +1 ppm (RMS) Vertical Positioning Accuracy 2.5 m +1 ppm (RMS)
	RTK Initialization	<5s
	Timming Accuracy	20ns (RMS)
IMU	Gyroscope Range	±300°/s
Performance	Bias Instability	5°/h
	Accelerometer Range	±16g
	Bias Instability	50µg
Power	Battery	7.4V, 7000mAh Li-lon Rechargerable,
	Operating Time	RTK Rover Up to 8 Hours
		Static Mode Up to 12 Hours
	Charger	Support charging adapter 12V/1.5A
Physical	Dimension (W x H)	Diameter160 mm x 100 mm
	Weight	1050 gram
TKDN (Tingkat Komponen Dalam Negeri) Certificate 38%		











