

GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) DUAL FREKUENSI

Merek Alat:

Trimble R8s

Kelengkapan:

- 1x battery per unit receiver
- 1x battery charger per unit receiver
- Radio Antena per unit receiver
- Trimble Geospatial Accessory – Power Supply and Power Cord for Dual Battery Charger per unit receiver
- 1x Tribrach with antenna adapter for Base Station
- 1x Alumunium Tripod for Base Station
- 1x Fiber Rangepole for Rover

Fungsi:

- Survei GNSS Statik
- Survei GNSS Postprocessed Kinematic (PPK)
- Survei Real Time Kinematic GNSS

Spesifikasi:

Satellite signals tracked simultaneously:

- GPS: L1C/A, L1C, L2C, L2E, L5
- GLONASS: L1C/A, L1P, L2C/A, L2P, L3
- SBAS: L1C/A, L5 (for SBAS satellites that support L5)
- Galileo: E1, E5A, E5B
- BeiDou (COMPASS): B1, B2

Positioning rates: 1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 Hz

Static GNSS surveying

High-Precision Static

Horizontal. 3 mm + 0.1 ppm RMS

Vertical. 3.5 mm + 0.4 ppm RMS

Static and Fast Static

Horizontal. 3 mm + 0.5 ppm RMS

Postprocessed Kinematic (PPK) GNSS surveying

Horizontal. 8 mm + 1 ppm RMS

Vertical. 15 mm + 1 ppm RMS

Real Time Kinematic surveying

Single Baseline <30 km

Horizontal. 8 mm + 1 ppm RMS

Vertical. 15 mm + 1 ppm RMS

Network RTK4

Horizontal. 8 mm + 0.5 ppm RMS

Vertical. 15 mm + 0.5 ppm RMS

Initialization time5. typically <8 seconds

Initialization reliability⁵. typically >99.9%

Data Formats

- CMR, CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 inputs and outputs
- 23 NMEA outputs, GSOF, RT17 and RT27 outputs, supports BINEX and smoothed carrier

Physical

- Dimensions 19 cm x 10.4 cm (7.5 in x 4.1 in), including connectors
- Weight. 1.52 kg (3.35 lb) with internal battery, internal radio and antenna
3.81 kg (8.40 lb) items above plus range pole, controller & internal radio
- Operating Temperature⁶. -40 °C to +65 °C (-40 °F to +149 °F)
- Storage Temperature. -40 °C to +75 °C (-40 °F to +167°F)

Communications and Data Storage

- Serial: 3-wire serial (7-pin Lemo) on Port 1; full RS-232 serial (Dsub 9 pin) on Port 2
- Radio Modem¹: fully Integrated, sealed 450 MHz wide band receiver/transmitter with frequency range of 403 MHz to 473 MHz, support of Trimble, Pacific Crest, and SATEL radio protocols:
 - Transmit power: 0.5 W
 - Range: 3–5 km typical / 10 km optimal⁹
- Cellular¹: fully integrated, sealed internal GSM/GPRS/EDGE/UMTS/HSPA+ modem option. CSD (Circuit-Switched Data) and PSD (Packet-Switched Data) supported. Global Operation:
 - Penta-Band UMTS/HSPA+ (850/800, 900, 1900, and 2100 MHz)
 - Quad-Band GSM/CSD & GPRS/EDGE (850, 900, 1800, and 1900 MHz)
- Bluetooth: fully integrated, fully sealed 2.4 GHz communications port (Bluetooth)¹⁰
- External communication devices for corrections supported on Serial and Bluetooth ports Data storage: 56 MB internal memory, 960 hours of raw observables (approx. 1.4 MB/day), based on recording every 15 sec from an average of 14 satellites

Receiver GNSS Trimble R8s



Controller GNSS Trimble R8s

- Mobilephone Samsung Galaxy M31
- Perangkat Lunak Trimble Survey Manager

