

GNSS RECEIVER

OS-113



Universal multifrequency GNSS receiver with an external antenna



WEB-SURVEY

Work with any OS (iOS, Android, etc.)

STEADY STREAM

2SIM GSM/UHF modem

RTK&GO

RTK and Stop&Go at the same time

STRONG EVENT

No false events

OS-113 is a multi-frequency GNSS receiver with an external antenna. It is ideal for recording RAW data. And it can also receive/transmit corrections as Base or Rover.

OS-113 is perfect for any high-precision applications where Raw data collecting or RTK positioning are required.

SIGNAL TRACKING

- 574 channels:
- GPS: L1 C/A, L2C, L2P, L5
- BeiDou: B1, B2, B3
- GLONASS: L1 C/A, L1P, L2 C/A, L2P
- Galileo: E1, E5a, E5b
- SBAS: WASS, EGNOS, MSAS, GAGAN

PERFORMANCE

- Cold start: <50 s
- Warm start: <45 s
- Hot start: <15 s
- RTK Initialization time: <10 s
- Signal reacquisition: <2 s
- Initialization reliability: >99.9%
- Velocity accuracy: 0.03 m/s
- Acceleration: 4 g
- Overload: 15 g
- Time accuracy: 20 ns

DATA FORMAT

- Correction data I/O: RTCM 2.X, 3.X, CMR(GPS only), CMR + (GPS only)
- Position data output:
 - NMEA-0183
 - ComNav protocols
 - Data output rate: 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz*

POSITIONING

RTK:
Horizontal: 8 mm + 1 ppm
Vertical: 15 mm + 1 ppm

DGPS: < 0,4 m 3D RMS

Standalone: < 1.5 m 3D RMS

SBAS: < 1 m 3D RMS

Post Processing:
Horizontal: 2.5 mm + 1 ppm
Vertical: 5 mm + 1 ppm

COMMUNICATIONS

- 2 RS232 Lemo4 (f) baud rates up to 460800 bps
- 1 Pulse Per Second (PPS) output BNC (f)
- GNSS antenna TNC (f)
- 1 Event Marker input
- Built-in UHF modem *
 - 410-470 MHz
 - 2W
 - TRIMTALK, TRANSEOT, TRIMMK3
 - UHF antenna TNC (f)
- Built-in 2SIM GSM modem
 - 2G/3G: 900/2100 MHz

- GSM1 antenna TNC (f)
- GSM2 antenna TNC (f)
- Bluetooth
- Wi-Fi 802.11 (APN, client)
- Ethernet RJ-45
- 1 RS232 Lemo4 (f) doubling of GSM/UHF output
- 10 LED indicators show the working status

PHYSICAL

- Size (L × W × H): 165 mm × 163,9 mm × 90,1 mm
- Weight: 1590 g

ENVIRONMENTAL

- Working temperature: -40°C to +70°C
- Storage temperature: -40°C to +85°C
- Humidity: up to 100% (condensation)
- Waterproof and dustproof: IP67, protected from temporary immersion to depth of 1 m
- Shock: designed to survive a 2 m drop onto concrete

ELECTRICAL

- Input voltage: +9.0 V ~ +28.0 VDC
- Power consumption: up to 3 W
- Built-in battery: 18000 mAh (9-28 V, 45 W)
- Memory 8 GB (32 GB*)

* - optional