



M10 Mini GNSS Receiver

Powerful performance

M10 Mini GNSS receiver is a new generation of portable high-precision GNSS receiver independently developed by ComNav Technology Ltd. With a built-in antenna and a multi-frequency OEM board that tracks full GNSS constellations, it can obtain accuracy positioning from sub-meter to centimeter. A 3000mAh battery integrated ensures up to 6 hours working time.

Size: 64 mm×130 mm×25.8 mm

Weight: About 175g

Features

Full GNSS constellations, multi-frequency tracking

Work seamlessly with NaviCloud Personnel Security Platform

Ideal for position tracking applications

Quickly accessed and configured with Android APP

In-built antenna and K803 OEM board

6 hours battery life

IP67 water-proof and dust-proof

User-friendly design

With small dimension and light weight, the M10 Mini can go wherever you go. It can be worn on the arm, hung on the backpack, fixed on the helmet or any other objects you want. Fast APP access is supported to get rid of cumbersome configuration. It can also output NMEA0183 data to any other software via BT and 4G.

Ideal for position tracking applications

The M10 Mini can be easily used for a wide range of personnel positioning applications by uploading the position data. Combined with NaviCloud, functions such as historical track query, electric fence, equipment management and rescue management could be achieved. It supports one-click call and remote location monitoring escort your personal safety.

M10 Mini GNSS Receiver

M Series GNSS Receiver

Ver.2021.11.20

Signal Tracking

Channels	965
GPS	L1 C/A, L2C, L2P, L5
BeiDou	B1, B2, B3
BeiDou Global Signal	B1C, B2a, B2b
GLONASS	L1 C/A, L1P, L2C/A, L2P
GALILEO	E1, E5a, E5b, E6, E5 AltBOC
QZSS	L1, L2C, L5
IRNSS	L5
SBAS	WAAS, EGNOS, MSAS, GAGAN,SDCM

Positioning Specifications

Post Processing	2.5 mm + 1 ppm Horizontal 5 mm + 1 ppm Vertical
Single Baseline RTK	8 mm + 1 ppm Horizontal 15 mm + 1 ppm Vertical
DGPS	<0.4 m RMS
SBAS	1 m 3D RMS
Standalone	1.5m 3D RMS

Electrical

Power supply	5V 1.5A DC with TYPE-C
Power consumption	<2W
Battery Capacity	3000mAh, up to 6 hours typically

Physical

Size	64mm×130mm×25.8mm
Weight	About 175g
Antenna	In-built Satellite Antenna
Indicator Light	1*Power light, 1*Satellite light, 1*Differential light
Button	1*Power button, 1*SOS button

Performance Specifications

Cold start	<60 s
Hot start	<15 s
RTK Initialization time	<10 s
Signal reacquisition	<1 s
Initialization reliability	>99.9%
Velocity accuracy	4 g
Overload	15 g
Time accuracy	20 ns

Data Format

Correction data I/O	RTCM2.X, 3.X, CMR/CMR+(GPS Only)
ASCII	NMEA 0183 GSV, RMC, HDT, GGA, GSA, ZDA, VTG, GST; PTNL,PJK; PTNL, AVR; PTNL, GGK
Binary	ComNav Binary
BINEX Data	0x00, 0x01-01, 0x01-02, 0x01-05, 0x7d-00, 0x7e-00, 0x7f-05
Position data output	1hz, 2hz, 5hz, 10hz, 20hz

Communications

Bluetooth® 4.0	Compatible with Android™ and Windows™ Mobile OS
4G module	Support Ntrip and Tcp protocol
1 Fischer connector for external antenna	
3 LEDs (indicating Power, Satellite Tracking and BT Connection Status)	

Environmental

Working temperature	-20 ℃ to +60 ℃
Storage temperature	-40 ℃ to +70 ℃
Humidity	100% no condensation
Waterproof and dustproof	IP67
Shock	Designed to survive a 1m drop onto concrete

Specifications subject to change without notice.