

PARTH 1000 IT GNSS RECEIVER



- » IRNSS enable
- > 965 channels
- >> GPS L1/L2/L5, BeiDou B1/B2/B3,
- » BeiDou Global B1C/B2a,
- » GLONASS L1/L2, Galileo E1/E5a/E5b and SBAS
- Advanced QUANTUMTM Technology WIFI/UHF/4G Module
- » Tilt Compensation
- Smart Battery Design(Hot Swap Battery)
- » Low Power Consumption

INTEGRATED GNSS RECEIVER

The receiver combines a GNSS board, Bluetooth® and adjustable TX & RX UHF into one compact device, one of the most reliable choices for surveying tasks. Built-in GPRS/ GSM/4G modem help for work with all kinds of CORS.

RUGGED AND USER FRIENDLY

The rugged housing with IP67
Dustproof & Waterproof design makes
the PARTH100 iT perfect and effectively
works even in harsh environments.
Small volume with less than 1kg
weight makes the PARTH100 iT one of
the most portable GNSS receivers
meeting your RTK survey demands.
Built-in 8GB internal memory enlarges
your data storage in the field.

SMART BATTERY DESIGN

With two hot swap batteries, the PARTH100 iT helps to extend working hours and ensure your fluent workflow in the field. The battery LEDs flash when battery shortage.

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SIGNAL TRACKING

965 GNSS Channel
IRNSS L5
GPS L1, L2, L2C, L5
BeiDou B1, B2, B3 B1C, B2a
GLONASS L1, L2
Galileo E1, E5a, E5b
QZSS Reserved
SBAS WAAS, EGNOS, MSAS, GAGAN

PERFORMANCE SPECIFICATIONS

Cold Start	>50s
Warm Start	>30s
Hot Start	>15s
Initialization Time	>10s
Signal Re-acquisition	>1.5s
Initialization Reliability	>99.9%

POSITIONING SPECIFICATIONS

Static and	3 mm + 0.5 ppm Horizontal
Fast Static	5 mm + 0.5 ppm Vertical
Long Observations	2.5 mm + 0.1 ppm Horizontal
Static	3.5 mm + 0.4 ppm Vertical
Real Time Kinematic	8 mm + 1 ppm Horizontal
	15 mm + 1 ppm Vertical
DGPS	<0.4 m Horizontal, <0.8m Vertical
SBAS	<0.6m Horaizontal, <1m Vertical

PHYSICAL

Size(L × W × H) 172 x 167 x 77mm	
Weight 1.2 kg with two batteries	

SOFTWARE

PARTH Survey Android-based data collection software
Windows based PPK software

Add: 105, Phase-IV, Udyog Vihar, Gurgaon-122 015 **Phone:** 0124-4013954, 4300950I Fax: 0124-2346646 **Web:** www.panindiagroup.com

DATA FORMAT

Correction Data I/O	RTCM 2.x, 3.x formats, CMR,CMR+
Position Data Output	ASCII: NMEA-0183 GSV, RMC, HDT, VHD, GGA, GSA, ZDA, VTG, GST; PTNL, PJK; PTNL, AVR; PTNL, GGK

ENVIRONMENTAL

Operating Temperature	40 °C to + 65 °C
Storage Temperature	-40 °C to + 85 °C
Humidity	100% non-condensing
Waterproof and Dustproof	IP67,1m temporary immersion .
Shock	2 m pole drop Survive

ELECTRICAL AND MEMORY

Input voltage	7-28 VDC
Power consumption	1.92 W
Li-ion battery capacity	2 × 2.2Ah
Memory	8GB(Expandable Up to 32GB)
Battery life time	10hrs(GNSS,UHFor GSM RX)

OPERATION

RTK UHF rover & base	
RTK UHF rover & base	
NTRIP, Direct IP/CORS	
Post-processing	

USER AND IO INTERFACE

IIII modem1. Tv/Dv with a full frequency range from	
Baud rates up to 921600bps for serial	
1 x 7 pin Lemo port (Serial and USB both function available)	

UHF modem1: Tx/Rx with a full frequency range from 410-470 MHz.

Transmit power: adjustable Range: 1-5 km. depends on power and line of side.

WIFI/4G modem

4G Bands: 800/900/1800/2100/2600 MHz

3G Bands: 900/2100 MHz

2G Bands: 900/1800 MHz

Support GSM, Point to Point/Points and NTRIP

Position data output rates: 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz

5 LEDs (indicating both Battery, Power, Satellite Tracking, GPRS Status and RTK)

Bluetooth®: V 4.0 protocol, Windows OS and Android OS compatible

TILT COMPENSATION

Built-in tilt sensor supports up to 60° tilt compensation with 2.5cm accuracy.