

KORT RTK GNSS RECEIVER



Full RTK Productivity in your hands
Outstanding GNSS Performance
Unique detachable UHF receiver
Best Cost / Benefit relation in the market
Works as Network or UHF RTK Rover
Operates as field UHF RTK Base
Rugged and Comfortable design
Power for the most demanding tasks
NMEA format for Software flexibility
External GNSS Antenna Support
SIM Card Support
Supports North RTK Surveyor and more

Portable Flexibility Total Power Control

Get hold on your investment and activate according to your needs

- GPS L1
- GPS L1+L2
- GPS L1+L2 RTK
- GPS L1+L2 + GLONASS L1 RTK
- GPS L1+L2 + GLONASS L1+L2 RTK
- RTK with CORS Network
- RTK with UHF Datalink
- and more...

330 CHANNELS DOUBLE FREQUENCY

MILLIMETRIC ACCURACY

KORT RTK GNSS RECEIVER

330 CHANNELS DOUBLE FREQUENCY

Kort GNSS RTK Handheld Receiver

System Overview

- Dual-frequency GNSS RTK Receiver with 330 channels.
 - Dual-frequency GNSS internal and external antenna support.
 - External Receiving Radiomodem compatible.
 - Works as Network or UHF Rover with external radiomodem.
 - Works as Base, supporting external radio modem.
 - Sunlight readable 3.7" transfective HD display
 - Integrated 3G / GPRS cellular modem.
 - Integrated Bluetooth® V2.1 Class 3 and WIFI® b/g wireless technology
 - Long life battery of 6800mAh.
 - Windows Mobile® 6.X
 - Rugged and weather-resistant design
- #### Standard Accessories
- North Kort RTK handheld with Microsoft Windows Mobile 6.X
 - Rugged Transport Case
 - Rechargeable battery • International AC charger
 - Mini USB and Serial Port output in LEMO standard.
 - 3.2 Megapixels Digital Camera.
 - Screen Protector, Stylus pen
 - Antenna port dust cover
 - Digital Quick Start Guide
 - External GNSS antenna with 1.5 m antenna cable and Pole Bracket (Optional)
 - All standard accessories are also available to order separately.
- #### Control System languages options
- English, Spanish, French, German, Italian, Portuguese

North Software Options

- North GIS Surveyor™
- North RTK Surveyor™
- Carlson SurvCE™
- Microsurvey Field Genius™
- Esri ArcPad™

Performance Specifications

Receiver

GNSS RTK on board

- North Stealth/CK Survey GNSS chip board with 330 Channels
- North Stealth Multipath Shield technology, for maximum noise filtering.
- Multiple radio samplers gives the most accurate band tuning available.
- Patented SAW filtering method for Doppler signal sampling.
- Always-To-Date system allows updates of the system for the foreseeable future.
- High precision multicorrelating GNSS pseudorange measurements.
- GNSS carrier phase with low noise with <1 mm precision in a 1 Hz bandwidth
- North Low-Track Technology for increased reception
- Signal-to-Noise ratios reported in dB-Hz
- Satellite signals tracked simultaneously:

GPS: L1C/A, L1C, L1E, L2C, L2E and L5

GLONASS: L1C/A, L1P and L2C/A

GALILEO: L1, L2 (optional)

COMPASS: L1C/A and L2C (optional)

SBAS: EGNOS, WAAS, MSAS, GAGAN

Sampling Rate: 10Hz – 0.1 second, (20Hz optional)

Code differential positioning (DGPS) with external antenna.

Horizontal ±0.25 m + 1 ppm RMS

Vertical ±0.50 m + 1 ppm RMS

Postprocessed static (PPS) and fast static (PPK) surveying with external antenna.

Horizontal ±4 mm + 1 ppm RMS

Vertical ±4 mm + 1 ppm RMS

Real Time Kinematic (RTK) surveying with external antenna.

Horizontal ±5 mm + 1 ppm RMS

Vertical ±5 mm + 1 ppm RMS

Initialization time typically <10 seconds

Initialization reliability typically >99.9%

Protocols

RTCM 2.1, 2.2, 2.3, 3.0 and 3.1, CRM, CRM+ input and output

RINEX, NMEA, NMEA Extended, Novatel (optional) outputs for GPS raw data

Hardware

Physical

Dimensions (WxHxD) 95 mm x 210 mm x 45 mm

Weight 575 g with internal battery

Temperature

Operating -20 °C to +60 °C

Storage -30 °C to +70 °C

Charging 0 °C to +45 °C

Relative humidity 100% condensing

Maximum operating altitude 3,300m

Maximum storage altitude 5,000m

Water and dust IP 67 Water and Dust proof.

Shock (non-operating) 1.5 m drop over concrete

Vibration FIG.514.5C-1

Electrical

Hardware

Processor Marvell PXA310 (624MHz)

RAM 256 MB

ROM 256 MB

Removable Media Micro SD up to 16 GB

Battery

Type Rechargeable, removable Li-Ion

Capacity 6,800mAh

Charge time 4 hours (typical)

Battery run-time per battery 9.5 / 8.0 hours. 6 hours with GPRS on.

Standby time (external GNSS antenna disconnected) 50 days

Buttons & Controls 4 Buttons

Connectors & Inputs

Internal microphone and speaker, Mini

USB, I/O Serial

Mini SD Card Socket, SIM Socket

LEMO HGG.0b, MCX (GNSS)

Camera

Still mode Autofocus 3.5 MP

Still image format JPG

Video mode Up to VGA resolution

Video file format WMV with audio

Cellular & Wireless

GSM 900/1800/1900MHz

3G (Optional) 850/900/2100/3600 MHz

GPRS 850/900/1800/1900/2100 MHz

Wi-Fi IEEE 802.11b/g 1–54 Mbps

Bluetooth Version 2.1 + EDR Class 3

Display

Type HD Transfective LED-backlit Retina LCD

Size 3.7 in diagonal

Resolution 480X640

Luminance 280 cd/m2

Notes:

- Accuracy, TTFF and reliability specifications may be affected by multipath, satellite geometry and atmospheric conditions.

- Specifications assume at least 5 satellites and follow up of recommended practices

- Specifications are subject to change without previous notice. This description may include typographical errors

- UHF type approvals are country specific

Authorized Dealer: