

RTk5+

GNSS Solution

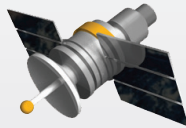
Powered By
GAMA
RTK

Carlson
BREAK NEW GROUND

The Carlson RTk5+ is a ruggedized Windows data collector with an advanced, built-in GNSS solution featuring Carlson's RTK engine, Gama. Designed for surveying, stake-out, construction layout and GIS mapping, the RTk5+ is bundled with Carlson SurvPC field software and comes standard with a 3-year NO-FAULT warranty³ to protect you from the unforeseen.

POWERFUL GNSS CAPABILITIES

- Advanced multi-frequency, multi-constellation (GPS + GLONASS + Galileo + BeiDou + QZSS) RTK GNSS performance
- Carlson's Gama RTK engine provides the highest level of certainty



PERFORMANCE

- Powerful Windows 11 for office-to-field use
- Plenty of memory - 16 GB RAM & 512 GB flash storage



EXPANDABLE BATTERY

- All-day battery runs 10+ hours for minimal downtime
- 5-minute hot swap

WARRANTY

- 3-year no-fault warranty³

A SUPERIOR FIELD SOLUTION

- Balanced & ergonomic; 25+% lighter than typical GNSS setups, -6 lbs (2.7 kg) with tablet, cradle, pole, and antenna
- Gather live, centimeter-level positions directly into an Esri database with zero post processing
- Operate handheld without a pole (only 2.6 lbs/1.18 kg) using a direct-connect helix antenna for fast GIS work with cm-level accuracy
- Long Range Bluetooth®, Dual-band Wi-Fi®, USB 3.0 connectivity, 4G LTE (GSM)

FIELD-TESTED RUGGED

- Operates in extreme temperatures from 14F to 122F (-10° C to 50° C)
- Dustproof & water resistant (IP65 rating)
- Designed to MIL-STD-810G for ultra-ruggedness

HIGH-VISIBILITY DISPLAY

- Large, 8-inch display for easy viewing
- 800 nits (cd2/M) brightness provides extraordinary visibility
- Capacitive touch screen with digital pen support



BREAK NEW GROUND

GNSS

- Multi-Frequency
- Multi-Constellation (GPS + GLONASS + Galileo + BeiDou + QZSS)
- RTK^{1,2}
- Horizontal accuracy: 0.008 m + 1 ppm
- Vertical accuracy: 0.011 m + 1 ppm
- Update rate up to 5 Hz
- Convergence time: < 10 sec
- Initialization times:
 - Cold starts 24 s
 - Reacquisition 2 s

- Windows/home key
- Power button
- 2 trigger buttons
- 4 programmable buttons

PORTS

- USB 3.0 x 1
- 3.5 mm audio jack
- USB Type-C power input jack
- Built-in speaker

BATTERY

- Removable Li-Ion battery, 8000mAh
- Operates 10+ hours on one charge
- Hot-swappable, easily changeable in field
- Optimized for strong performance in cold temperatures
- Excellent lifecycle performance

PHYSICAL

- Size: 6.1 x 9.4 x 1.5 in (155 x 238 x 39 mm)
- Tablet Weight: 2.85 lbs (1.29 kg)
- Complete setup on pole: ~6 lbs (2.72 kg)
- Durable, shock-resistant design
- Easy-to-grip, impact-absorbing, overmolded bumpers
- Lightweight and ergonomic design

WIRELESS CONNECTIVITY

- Long Range Bluetooth® (tested to 1,500'/450 m)
- Wi-Fi 802.11 a/b/g/n/ac, 2.4 GHz and 5 GHz
- 4G LTE (GSM)

CAMERA

- 8 MP rear mounted

CERTIFICATIONS AND STANDARDS

- IEC 62368-1
- FCC Class B
- CE Marking (applicable EMC, R&TTE, and LVD directives)
- RoHS Compliant
- Industry Canada
- HERO (Hazard of Electromagnetic Radiation to Ordnance) certified
- TPM (Trusted Platform Module) v2.0

FIELD-TESTED RUGGED

- IP65 for dust and water resistance
- Operating Temperature: 14 F to 122 F (-10° C to 50° C)
- Storage temperature: -4 F to 140 F (-20° C to 60° C)
- MIL-STD-810G for shock and vibration protection

WARRANTY

- 3-year no-fault warranty³
- Service plans available


STANDARD ACCESSORIES

- Antennas: Survey grade, Helix/GIS, and LR Bluetooth
- Custom survey pole
- Custom cradle with pole mount & 1" ram arm
- Standard removable battery
- AC wall charger
- Screen protector
- Quick Start Guide
- Hand strap

1 Depends on multipath environment, number of satellites in view, satellite geometry, and ionospheric activity

2 Depends also on baseline length


3 Three years of No-Fault Accidents
Warranty includes repair or replacement of RTk5+, with coverage for ONE (1) LCD-related incident per unit, per warranty year. Battery and accessories are excluded under the warranty. Free two-way ground shipping for USA customers.



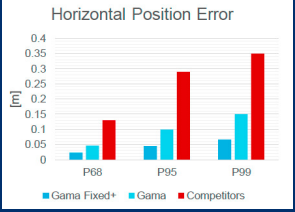
Carlson Software's next generation Gama RTK engine deploys a range of new technologies. The end result? Best-in-class performance for your work.

And yes, we've tested it against the competition...

NEXT TO WALL




Horizontal Position Error

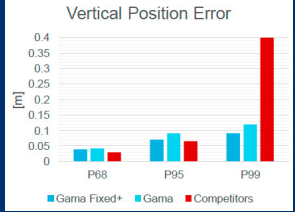


Based on a total of 90 hours of data from 22 different data sets recorded at different locations.

DENSE FOLIAGE



Vertical Position Error



Based on a total of 56 hours of data from 13 different data sets recorded at different locations.

PROCESSOR

- Intel® Core® N250 4-Core (up to 3.70 GHz)

OPERATING SYSTEM

- Microsoft® Windows 11 IoT LTSC
- Multiple languages supported (English, French, Spanish, German, Portuguese)

MEMORY AND DATA STORAGE

- 16 GB RAM
- 512 GB flash storage
- User-accessible smart card reader

GRAPHICS

- Intel® HD Graphics

DISPLAY

- Active viewing area: 8" (203 mm)
- Resolution: WXGA (1280 x 800)
- High-visibility backlit LCD for sunlight viewability
- Portrait or landscape orientation with automatic screen rotation

TOUCH SCREEN

- Projected capacitive multi-touch interface for use with gloves, small tip stylus, and in wet conditions

OTHER SENSORS

- Integrated eCompass

PHYSICAL KEYS

- LED backlight adjustment keys

Bundled with SurvPC 7

The Windows-based data collection program with the ability to run Esri in the field. Or use in the office with any Carlson office software.

