



RX520

L1/L2 GPS + GLONASS GNSS RECEIVER

The RX520 dual frequency GNSS receiver brings a new level of accuracy and performance to your guidance and autosteer applications. This flexible receiver can operate in a variety of modes, using the latest technology to provide consistent, stable and accurate positions. Optional satellite delivered Precise Point Positioning (PPP) further enhances pass-to-pass accuracy for more demanding applications.

Integrated GNSS Design

The RX520 provides an integrated L1/L2 GPS+GLONASS receiver and antenna in a single compact enclosure. Designed to meet or exceed stringent MIL-STD-810G specifications, the RX520's rugged housing ensures high performance even in the most challenging work environments.

Multi-Constellation for Enhanced Positioning

Capable of tracking L1, L2 GPS+GLONASS and L-Band, the RX520 improves position availability in obstructed sky conditions. Dual-frequency tracking minimizes the impact of ionospheric disturbances further enhancing field productivity. Optional L-Band tracking provides very accurate, repeatable positioning without the need for a base station.

Smooth, Pass-to-Pass Accuracy with ClearPath Technology

ClearPath technology is integrated into every RX520 antenna. ClearPath uses very accurate carrier phase calculations to provide ultra smooth positions and excellent pass-to-pass accuracy for agricultural applications. ClearPath functions autonomously and with most available corrections services. It will also bridge through short periods of poor satellite availability. ClearPath's steady, smooth output is especially well suited for manual guidance and autosteer installations.



Features and Benefits

- L1/L2 dual frequency GNSS receiver supports both GPS and GLONASS satellites
- One piece, rugged smart antenna design with integral magnets allows for low-profile installation
- Compatible with various SBAS correction signals including WAAS, EGNOS, MSAS, GAGAN, etc.
- For use with TeeJet and third-party guidance systems
- Optional PPP upgrade provides improved pass-to-pass accuracy and year-to-year repeatability
- Robust power handling for 12 V to 36 V vehicle power

Precise Point Positioning (PPP)

- RX520 can be purchased with or upgraded to PPP accuracy at any time
- PPP provides significantly improved pass-to-pass accuracy and year-to-year repeatability as compared to standard L1/L2 SBAS correction
- PPP level accuracy is ideal for a range of applications including row crop planting
- PPP signal is available worldwide and delivered via TerraStar
- TerraStar subscription service is offered 1-, 3-, 6- or 12-month packages

System Accuracy

| Signal Type | Pass-to-Pass Accuracy* | Year-to-Year Repeatability |
|------------------|------------------------|----------------------------|
| L1/L2 Autonomous | +/- 6-10 in/15-25 cm | +/- 36 in/1 m |
| L1/L2 SBAS | +/- 5-8 in/13-20 cm | +/- 36 in/1 m |
| L1/L2 PPP | +/- 2-4 in/5-10 cm | +/- 4 in/10 cm |

* Based on 15-minute time period. Actual field performance can vary from above stated information based on geographic location and constellation configuration at time of operation.

RX520 Kits and Components

| Part No. | Description |
|----------|---|
| 90-02893 | Kit, GNSS Receiver, RX520, L1/L2, ClearPath, Autonomous |
| 90-02894 | Kit, GNSS Receiver, RX520, L1/L2, ClearPath, SBAS |
| 90-02895 | Kit, GNSS Receiver, RX520, L1/L2, ClearPath, SBAS, PPP |
| 90-02899 | Kit, GNSS Receiver, RX520, ClearPath, PPP, No-SBAS |
| 65-05243 | Mounting Bracket, RX520 |
| 45-05957 | Cable, RX520 to Power & Serial Com1 |

For system specifications please see RX520 User Guide, 98-01491

RX520 Upgrades and Subscriptions

| Part No. | Description |
|----------|--|
| 99-01041 | Upgrade, RX520, Base Unit to PPP |
| 99-01044 | Subscription, TerraStar, 1-month, China |
| 99-01045 | Subscription, TerraStar, 3-month, China |
| 99-01046 | Subscription, TerraStar, 6-month, China |
| 99-01047 | Subscription, TerraStar, 1-year, China |
| 99-01048 | Subscription, TerraStar, 1-month, EU, RU, ME |
| 99-01049 | Subscription, TerraStar, 3-month, EU, RU, ME |
| 99-01050 | Subscription, TerraStar, 6-month, EU, RU, ME |
| 99-01051 | Subscription, TerraStar, 1-year, EU, RU, ME |
| 99-01052 | Subscription, TerraStar, 1-month, NA, CA |
| 99-01053 | Subscription, TerraStar, 3-month, NA, CA |
| 99-01054 | Subscription, TerraStar, 6-month, NA, CA |
| 99-01055 | Subscription, TerraStar, 1-year, NA, CA |
| 99-01056 | Subscription, TerraStar, 1-month, ROW |
| 99-01057 | Subscription, TerraStar, 3-month, ROW |
| 99-01058 | Subscription, TerraStar, 6-month, ROW |
| 99-01059 | Subscription, TerraStar, 1-year, ROW |
| 99-01060 | Subscription, TerraStar, 1-month, SA |
| 99-01061 | Subscription, TerraStar, 3-month, SA |
| 99-01062 | Subscription, TerraStar, 6-month, SA |
| 99-01063 | Subscription, TerraStar, 1-year, SA |

