



- Affordable GPS + GLONASS integrated receiver
- Integrated Bluetooth and Interface Control Panel
- RTK real-time positioning
- Network RTK positioning
- Comprehensive TDS Survey Pro field software
- Support for all GNSS data with Spectra Precision Survey Office software

The Spectra Precision® EPOCH® 35 GNSS system uses highly accurate Global Positioning System (GPS) and GLONASS technology for cadastral, topographic, control, stakeout and other precision survey applications. Combining both these satellite services provides the user with the greatest possible satellite coverage, allowing observations in areas where only one satellite solution would not provide results.

The EPOCH 35 is a complete GNSS system that includes a base, rover, field software, data collector, and radio modem. The EPOCH 35 GNSS rover features integrated Bluetooth capability, an internal radio modem and battery. The system runs TDS Survey Pro software. This premiere field software operates on the TDS Recon®, Nomad™, or Ranger™ data collectors.

With fast, reliable initialization, the EPOCH 35 GNSS is a measurement solution that provides high-quality results in several survey modes including RTK and Static. The system operates without line-of-sight between points, and can be used in any weather. Designed as a multi-purpose, integrated system, the EPOCH 35 GNSS system provides total flexibility. Built especially for surveyors, the compact and lightweight EPOCH 35 GNSS integrates the user control interface panel into one powerful measurement solution.

For RTK surveying, the base system may include a choice of radio modems that provide either a high or low power data link from the base to the rover. In addition Network RTK is also supported by simply connecting to an external data capable cellular modem. Back at the office, surveyors can use the Spectra Precision Office software for postprocessing and quality control.

GNSS SYSTEM

General

When connected to the data collector

- GPS & GLONASS with centimeter accuracy
- Ergonomic, light and
- Integrated Wireless Bluetooth
- Color touch-screen indicators
- Application programs, data logging
- Access Network RTK

Technical Specifications

Static GNSS surveying

Horizontal	±5	mm
Vertical	±5	mm

Real-Time surveying

Horizontal	±10	mm
Vertical	±20	mm
Initialization	Automatic	OTF (on-the-fly)
Initialization time	Typically	<30 seconds
Start-up	<60	seconds from power
	<30	seconds with recent

Code differential GPS positioning

WAAS/EGNOS differential positioning	Typically	<5 ² m
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Measurements

- Low elevation satellite tracking
- 14 L1, SBAS, WAAS/EGNOS
- NMEA-0183: AVR, GSV, HD1, Accuracy, VGL, reliability, VHD, by subject to anomalies and PJ
- GGA, GSA, ZDA, multipath, obstructions, satellite geometry, and atmospheric conditions. Always follow recommended survey practices.
- 5 Hz position

Physical

Dimensions (W×H)	x	
GPS receiver		
19.0 (7.48)	cm (in)	x
Weight		
Base	1.0	kg (2.2 lb)
Rover	1.1	kg (2.4 lb),
UHF antenna		internal
Ports		
I/O Two	7-pin	Lemo, RS-232
Data	Link	antenna TNC (Rover only)

environmental

Operating temperature

(GNSS) RTKc duab frequency

Storage temperature

compact design to +75

Humidity

for 95%, satellite condensing

Water/Dust

IP64 data management

Shock and Vibration: Tested

following environmental standards:
Shock UNE EN 60068-2-27
Vibration MIL-STD-810F Fig 514.5C-1

Electrical

Power input and 1 battery	10 with 1 Port	V over-voltage protection (7-pin)
Rechargeable, 7.4v	ppm 2	2400 mAH
Power consumption is		<2.5
Average operating times	internal radio	on hours
–	RTK/Static: 5.5	hours

Communication

Base Pacific Crest	LPB	or
OTA	9600	bps
2.1, 2.2, 2.3,		2.3,
Rover Integrated receive-only		UHF
tracking technology &		3.0,
L2 GPS, 12		L1, 12

HD1, Accuracy, VGL, reliability, VHD, by subject to anomalies and PJ
ZDA, multipath, obstructions, satellite geometry, and atmospheric conditions. Always follow recommended survey practices.

² Depends on WAAS/EGNOS system performance.

³ Two batteries supplied standard.