

FEATURES AND BENEFITS

HIGH-PRECISION GPS RECEIVER

- Superior satellite tracking
- Efficient measuring times
- Optimal precision
- Low power usage

LOW-MULTIPATH, HIGH-ACCURACY GPS ANTENNA

- The patented technology of the EPOCH 25 system mitigates unwanted signal interference or "multipath." Multipath is a source of error caused by signals being reflected from surfaces like the ground, surrounding trees and objects or buildings.

CHOOSE A LONG-RANGE OR SHORT-RANGE RADIO MODEM

- With the EPOCH 25 you can choose the PDLHPB™ or PDLLPB™ radio modem from Pacific Crest, the industry leader in RTK data links. Field-proven, the PDLHPB is the most powerful radio available today.

FLEXIBLE, MULTI-USE DATA COLLECTOR

- The Recon and Ranger data collectors were specifically designed for tough surveying environments; they're extremely robust, meeting military specifications for drop, vibration, immersion, and operating temperatures.
- Surveyors can quickly learn to operate the system via familiar options, menus, and commands.

TRIPOD DATA SYSTEMS

Tripod Data Systems (TDS) develops hardware and software for mobile computing applications in extreme outdoor and industrial environments. TDS produces data collectors and software for land surveying and construction applications, and GIS systems for field data collection and automation. TDS is the distributor for Nikon® and Spectra Precision® survey products (U.S. and Puerto Rico) as well as Pacific Crest radios and accessories (U.S., Puerto Rico, and Canada). TDS Survey Pro is a line of data collection software that has been the #1 choice of surveyors since 1995.¹

TDS, a wholly owned subsidiary of Trimble, is headquartered in Corvallis, Oregon and was founded in 1987.

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YOUR LOCAL TDS/SPECTRA PRECISION DEALER

¹ BNP Media, "Surveying and Mapping Industry Study" 1995-2006. Includes TDS software sold by dealers and TDS partner companies.

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- Robust field performance for rugged surveying conditions.
- Spectra Precision® GPS technology for accurate and reliable real-time positioning.
- Easy-to-use field software performs Real Time Kinematic (RTK), Network RTK, VRS™, and Static surveys.
- Survey Pro field software and GPS system provide fast, one-person surveying solutions.



EPOCH™ 25 L1/L2 RTK GPS SYSTEM

EXCELLENCE FOR EVERY SITUATION

This multipurpose surveying tool has been designed to meet the everyday needs of surveyors. The EPOCH 25 provides high-quality measurement results in several modes including RTK, Network RTK, VRS, and Static by using advanced L1/L2 GPS technology.

VERSATILE

The form factor of the EPOCH 25 GPS results in maximum flexibility. It can be used as a completely integrated system or as a separate system with components to meet the requirements of a variety of applications. The EPOCH 25 system combines an L1/L2 GPS receiver, EPOCH L1/L2 GPS antenna, base and rover. Each piece is built tough and reliable to meet the needs of today's busy surveyor.

HIGHLY PRODUCTIVE

The EPOCH 25 is a highly productive measurement solution, allowing the user to collect topographic data and stake layout detail. The system operates without line-of-sight between points, and it can operate anytime in any weather, thereby offering much greater productivity over traditional optical surveying techniques.

EASY TO LEARN AND USE

Easy-to-use Survey Pro field software controls the EPOCH 25 GPS system on the job site. It makes performing survey tasks fast and easy with reliable results.

The software is extremely user-friendly, allowing new GPS users to reach maximum productivity in a short time. You and your survey crews can start surveying with GPS without significant downtime for training.



SPECIFICATIONS

STANDARD FUNCTIONS

Measurements

- Highly accurate GPS L1/L2 technology
- Unfiltered, unsmoothed pseudorange measurements data for low noise, low multipath error, low time domain correlation and high dynamic response
- Very low noise L1 and L2 carrier phase measurements with 1 mm precision in a 1 Hz bandwidth
- Low elevation satellite tracking technology
- 24 channels L1 C/A Code, L1/L2 Full Cycle Carrier, WAAS/EGNOS¹

SUPPORT

Code differential GPS positioning²

Horizontal ±0.25 m + (1 ppm x baseline length) RMS
Vertical ±0.50 m + (1 ppm x baseline length) RMS
WAAS differential positioning accuracy³ Typically <5 m 3DRMS⁴

Static GPS surveying²

Horizontal ±5 mm + (0.5 ppm x baseline length) RMS
Vertical ±5 mm + (1 ppm x baseline length) RMS

Real-Time Kinematic surveying (RTK, Network and VRS)²

Horizontal ±10 mm + (1 ppm x baseline length) RMS
Vertical ±20 mm + (1 ppm x baseline length) RMS
Initialization time Single/Multi-base minimum 10 sec
+0.5 times baseline length in km
Initialization reliability² Typically >99.9%

TECHNICAL SPECIFICATIONS

Physical

Dimensions (W x H x D) 5.7 in x 3.2 in x 5.7 in
(14.5 cm x 8.1 cm x 14.5 cm), incl. connectors

Weight
Base 2.0 lb (0.93 kg)
Rover 2.6 lb (1.18 kg) with internal battery,
internal radio, standard UHF antenna

EPOCH L1/L2 antenna 1.20 lb (0.55 kg)
RTK Rover 7.8 lb (3.55 kg) entire RTK rover including internal battery,
range pole, Recon and bracket
Ports Two DB9 RS232 Serial,
TNC GPS external,
BNC radio modem (Rover only)

ENVIRONMENTAL

Operating temperature⁴ -4 °F to +140 °F (-20 °C to +60 °C)
Storage temperature -40 °F to 167 °F (-40 °C to 75 °C)
Humidity 100%, condensing
Water/Dust IEC 144/855420 IP67, water tight and dust proof
Shock/Vibration: Tested and meets the following environmental standards:
Shock Designed to survive a 6.6 ft (2 m) pole drop onto concrete
Vibration MIL-STD-810F, Method 514.5, Procedure II, Category 5

ELECTRICAL

- Power 0 to 20 V DC external power input with over-voltage protection on Port 1 and Port 2 (DB9-pin)
- Rechargeable, 7.4 V, 3.6 Ah Lithium-Polymer internal battery
- Power consumption is <2.5 W, in RTK mode with internal radio
Operating times on internal battery: 8 hours

COMMUNICATIONS

Base:

- Pacific Crest HPB or LPB (450–470 MHz)
- RTCM 2.1, 2.2, 2.3, 3.0, Trimble CMR+
- 5 Hz position rate

Rover:

- Integrated receive-only radio (450–470 MHz)
- RTCM 2.X, 3.X, Trimble CMR+
- 5 Hz position rate

¹ WAAS/EGNOS capable GPS receiver dependent on field software application.

² Accuracy and reliability may be subject to anomalies such as multipath, obstructions, satellite geometry, and atmospheric conditions. Always follow recommended survey practices.

³ Depends on WAAS system performance.

⁴ Receiver will operate normally to -20 °C. Bluetooth module and internal batteries are rated to -20 °C.

Specifications are subject to change without prior notice.