



# GPS Pathfinder Pro XRS receiver

## KEY FEATURES

Real-time submeter accuracy

Integrated satellite, beacon, and SBAS differential receiver

EVEREST multipath rejection

Rugged design

Ergonomic, comfortable backpack system

Choice of field computer and field software



## HIGH-PERFORMANCE GPS WITH A WORLD OF REAL-TIME OPTIONS

The versatile GPS Pathfinder® Pro XRS receiver is the thoroughbred of GPS receivers. Offering a full range of accurate real-time correction sources, great performance in all GPS conditions, and rugged design for the toughest environments, the Pro XRS receiver is an essential tool for collecting and maintaining GPS data.

### Built to meet your demands

With the Pro XRS receiver, you don't have to worry whether you can keep working in harsh conditions. All its components are sealed in a robust casing. Waterproof, dustproof, and shock-resistant, the Pro XRS receiver can work anywhere you can.

Just as tough is the custom-designed ergonomic backpack. But it's light and comfortable, so you can wear it all day.

### You're spoiled for real-time choice

If you're navigating in the field, or finding your way back to a previously recorded feature, you've got all the real-time options covered. Corrections from a radiobeacon, the OmniSTAR satellite differential service, or a satellite-based augmentation system (SBAS) like WAAS or EGNOS are not just built in, they're seamlessly integrated into the receiver. Want the freedom to connect to an external correction source like a virtual reference station (VRS)? You've got it. This array of real-time sources makes the Pro XRS receiver the most adaptable real-time GPS receiver around.

### High quality, accurate data for your GIS

With the Pro XRS receiver, you can be sure that the data you collect meets your high standards. Offering submeter accuracy real-time, and 50 cm accuracy postprocessed, it's the ideal choice for collecting the high quality GPS data you need in your GIS. And it has advanced design features, like EVEREST™ multipath

rejection technology, to ensure you get only the best positions.

### Get the results you want

The GPS Pathfinder Pro XRS receiver's advanced design gives you complete control over GPS quality. You can focus on productivity, to keep working even in adverse GPS conditions. Or you can configure the receiver to deliver only the most precise positions. It's up to you.

### Flexible data collection options

Pick the field computer and software that fits your workflow. The Pro XRS receiver is ready to use with a variety of computers, including Trimble's own range of rugged field computers: the Trimble® Recon™ handheld, Trimble Ranger™ handheld, and the GeoExplorer® series.

Choosing software? Trimble's TerraSync™ software or the GPScorrect™ extension for ESRI ArcPad software provides a complete solution from field to office and back. Choose off-the-shelf GPS field software, or use the GPS Pathfinder Tools SDK to build your own application that's totally customized to your needs.

### All you need

You need equipment that's as adaptable and hard-working as you are. So when you're choosing GPS equipment, don't compromise. Get a GPS Pathfinder Pro XRS receiver and have it all.

# GPS Pathfinder Pro XRS receiver

## STANDARD FEATURES

### GPS

- Integrated GPS/beacon/satellite/SBAS<sup>1</sup> receiver
- Integrated GPS/beacon/satellite/SBAS antenna
- Real-time differential correction sources:
  - MSK radiobeacon
  - OmniSTAR satellite
  - SBAS<sup>1</sup>
- EVEREST multipath rejection technology
- RTCM input/output
- NMEA output

### Accessories

- International AC re-charger and power supply
- Rechargeable system batteries (8 hours of field use)
- Ergonomic backpack carrying system
- 3 meter antenna cable

## OPTIONAL FEATURES

### Software

- TerraSync software
- Trimble GPSCorrect extension for ESRI ArcPad software
- Custom application built using the GPS Pathfinder Tools Software Development Kit (SDK)
- GPS Pathfinder Office software
- Trimble GPS Analyst™ extension for ESRI ArcGIS software

### Field computers

- Field computer running Microsoft® Windows Mobile® 2003 software for Pocket PCs, such as:
  - Trimble Ranger handheld
  - Trimble Recon handheld
  - GeoExplorer series handheld
- Field computer running Microsoft Windows® desktop operating system

### Accessories

- Vehicle kit (includes cigarette lighter power adaptor, quick release, 2 quick release adaptors, and magnetic mount)
- Hard carry case

## TECHNICAL SPECIFICATIONS

### Physical

#### GPS Receiver

Size . . . . . 11.1 cm x 5.1 cm x 19.5 cm (4.4 in x 2.0 in x 7.7 in)  
Weight . . . . . 0.76 kg (1.68 lb)

#### Antenna

Size . . . . . 15.5 cm diameter x 14 cm high (6.1 in x 5.5 in)  
Weight . . . . . 0.55 kg (1.2 lb)

Power . . . . . 7 Watts (maximum), 10 to 32 VDC

### Environmental

#### Temperature

Operating . . . . . -20 °C to +65 °C (-4 °F to +149 °F)  
Storage . . . . . -30 °C to +85 °C (-22 °F to +185 °F)

Humidity . . . . . 100% fully sealed

Receiver casing . . . . . Dustproof, splashproof, shock-resistant  
Sealed to 5 psi

Antenna casing . . . . . Dustproof, waterproof, shock-resistant

### GPS

Channels . . . . . 12 (L1 code and carrier)

Integrated real-time . . . . . SBAS<sup>1</sup>

Update rate . . . . . 1 Hz

Time to first fix . . . . . 30 seconds (typical)

Protocols . . . . . TSIP, NMEA (GGA, VTG, GLL, GSA, ZDA, GSV, RMC)

### Accuracy (HRMS)<sup>2</sup> after differential correction

Postprocessed . . . . . 50 cm

Carrier postprocessed<sup>3</sup>

With 5 minutes tracking satellites . . . . . 30 cm

With 10 minutes tracking satellites . . . . . 20 cm

With 20 minutes tracking satellites . . . . . 10 cm

With 45 minutes tracking satellites . . . . . 1 cm

Real-time . . . . . Submeter

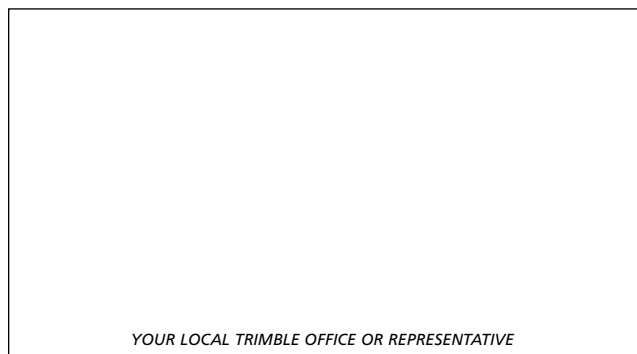
<sup>1</sup> SBAS (Satellite Based Augmentation System). Includes WAAS (Wide Area Augmentation System) available in North America only. And EGNOS (European Geostationary Navigation Overlay System) available in Europe only.

<sup>2</sup> Horizontal Root Mean Squared accuracy. Requires data to be collected with minimum of 4 satellites, maximum PDOP of 6, minimum SNR of 39 dBHz, minimum elevation of 15 degrees, and reasonable multipath conditions. Ionospheric conditions, multipath signals or obstruction of the sky by buildings or heavy tree canopy may degrade precision by interfering with signal reception. Accuracy varies with proximity to base station by +1 ppm for postprocessing and real-time.

<sup>3</sup> Accuracy varies with proximity to base station by +5 ppm.

Specifications subject to change without notice.

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