# DATASHEET

# TerraSync software

### **KEY FEATURES**

Smart time-saving features for effortless GIS data collection and maintenance

Seamless GPS control for quality position data

Graphical navigation and real-time map display

Runs on Trimble's ruggedized Windows Mobile field computers

H-Star data collection for high accuracy with the GPS Pathfinder ProXRT and ProXH receivers, or the GeoXH handheld

Real time and post-processed GLONASS support for the GPS Pathfinder ProXRT receiver

## FIELD SOFTWARE FOR QUALITY GIS DATA

The TerraSync<sup>™</sup> software is powerful field software, designed for fast and efficient data collection and maintenance. Teamed up with a supported Trimble<sup>®</sup> GPS receiver and a field computer of your choice, it's all you need to collect quality feature and position data for your geographic information system (GIS).

#### **Effortless data collection**

Whether you need to collect many identical assets or a range of assets with many different attributes, the TerraSync software lets you capture high quality data quickly and easily. You can create a data dictionary based on the enterprise GIS so that features, attributes, and acceptable attribute values match the GIS data structure. Now you can be sure that the data you collect will always meet the decision makers' requirements.

Using a data dictionary improves efficiency and ease of use in the field, with time-savers like pre-defined pick lists and automatic generation of date and time values. And, to make your field session effortless, the TerraSync software puts smart features like map-centric operation, graphical status display, and the ability to record a position offset if you can't get right to the feature at your fingertips.

The TerraSync software makes it easy for you to incorporate photo capture into your data collection workflow when using a Trimble handheld with an integrated camera. TerraSync enables you to take and preview photos, automatically attaches them to the current feature, and stamps each photo with the time, date and location at which it was taken.

#### Smart data maintenance

When you need to go back into the field to verify and update your GIS data, the TerraSync software makes the job as quick as possible. Waypoint files can be created within TerraSync software, or imported from GPS Pathfinder® Office software, to help you navigate in the field. You can sort and filter imported features from your GIS, based on the order you want to visit them. Features can be viewed as a simple list, or on the color-coded map with an aerial photo or satellite image in the background for reference. To revisit an asset, select the corresponding feature from the list or map, and then let the intuitive graphical GPS navigation tools guide you to precisely where you need to go. TerraSync even integrates with popular turn-by-turn navigation software such as CoPilot Live 7 Professional. When you start navigating to a feature or waypoint, the TerraSync software passes that location to your turn-by-turn software, which quickly and safely guides you to your destination. Once you have reached a waypoint, the TerraSync software marks it as visited. If you edit an existing feature, the TerraSync software marks it as updated.

#### Quality control made easy

With the TerraSync software it's a breeze to collect data to your required accuracy, either when collected in real time in the field, or to that predicted after postprocessing. Simply use the accuracy-based logging settings to specify the GPS data quality that your enterprise GIS demands and let TerraSync do the rest. To make sure your time in the field will be productive, use the Plan section to view a graphical prediction of the GPS satellite constellation and identify the best times for data collection.

The TerraSync software integrates seamlessly with a range of Trimble GPS receivers to give you the high quality data you need. You can differentially correct your data back in the office, use real-time differential GPS, or both-the choice is yours. For extra precision, collect H-Star<sup>™</sup> data with a GPS Pathfinder ProXRT receiver, a GPS Pathfinder ProXH<sup>™</sup> receiver, or a GeoXH<sup>™</sup> handheld. Completely integrated with existing data collection workflows, H-Star technology makes high accuracy data collection faster and easier than ever before. Alternatively, with a GeoXT<sup>™</sup> or Juno<sup>™</sup> series handheld, or a ProXT<sup>™</sup> receiver, you can achieve optimal GPS code processing accuracy with the new Trimble DeltaPhase<sup>™</sup> technology.

Whichever combination of GPS receiver and correction method suits your needs, you can be sure of clear feedback while you work, and first-class data for your GIS.

Simple, effective, and productive in the field—the TerraSync software is the easy-to-use tool you need to collect and maintain quality GIS data.



#### FEATURES AND OPTIONS

### **Key features**

- Collect position, feature, and attribute data
- Industry-leading GNSS receiver configuration and control
- Fast, real-time map display supports multiple raster and vector background maps
- Graphical screens for navigation back to selected features
- Integrates with CoPilot Live 7 Professional software for TerraSync, and TomTom Navigator 6 software
- Waypoint support for productive use of field time
- Data dictionary editor for customized data collection requirements • Data dictionary capabilities allow in-field modifications to
- data dictionaries
- Mission planning to find the best time to collect data
- Supports multimedia attributes such as voice and image files
- Optimized for Trimble handhelds with integrated digital cameras
- · Send and receive files by e-mail directly in the field
- Supports ESRI Shapefiles

**GPS** accuracy

- Real-time differential correction (available sources depend on GNSS receiver and base station used)
- Improved position accuracy with differential postprocessing of GPS and GLONASS data
- Achieve up to decimeter (10 cm / 4 inch) accuracy using real-time or postprocessed H-Star technology (dependent on H-Star-capable receiver and antenna combination used)
- Supports logging of DeltaPhase data for optimal code accuracy after postprocessing
- Support for collection of RTK data with Trimble 5800, R8, and **R8 GNSS receivers**

Software editions

- TerraSync Standard edition for data collection
- TerraSync Professional edition for data collection and maintenance For a product comparison of the Standard and Professional editions visit: www.trimble.com/mgis\_prodcomp.shtml

#### Supported GPS receivers

- GPS Pathfinder ProXT receiver
- GPS Pathfinder ProXH receiver
- GPS Pathfinder ProXRT receiver
- GPS Pathfinder XC receiver
- Trimble 5800 receiver
- Trimble R8 receiver
- Trimble R8 GNSS receiver
- Supported field computers with integrated GPS
- GeoXH handheld
- GeoXT handheld
- GeoXM<sup>™</sup> handheld
- Juno SB handheld
- Juno SC handheld
- Trimble Nomad® G series handheld
- Trimble Recon® GPS XC edition
- Trimble Yuma<sup>™</sup> rugged tablet computer

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• Trimble Ranger<sup>™</sup> handheld Trimble Recon handheld

#### **Available languages**

• Chinese (Simplified)

Supported field computers

• German English Italian

 French Japanese

Russian

# **RECOMMENDED PLATFORM**

Windows Mobile field computer

Windows mobile field computer
Operating system Windows Mobile® version 5.0 software or
Windows Mobile version 6
Processor typeARM or XScale
Processor speed 200 MHz or faster
Memory
Input/output Serial cable and RS-232 serial port
(or appropriate adaptor)
or Bluetooth <sup>®</sup> technology for connection to
GPS Pathfinder Pro series receiver or GPS Pathfinder XB receiver
DisplayColor touch screen (240 × 320 pixels or larger)
Reflective screen (or other screen suitable for outdoor viewing)
Windows field computer
Operating system
(Home, Professional, or Tablet PC Edition)
(32- or 64-bit versions)
or Windows Vista <sup>®</sup> or Windows 7
or Windows Vista® or Windows / (Home, Business, or Ultimate editions)
(Home, Business, or Ultimate editions)
(Home, Business, or Ultimate editions) (32- or 64-bit versions)
(Home, Business, or Ultimate editions) (32- or 64-bit versions) Processor speed

GPS Pathfinder Pro series receiver

• Korean

Spanish

Portuguese

- Vector formats

- Enhanced Compression Wavelet (.ecw)

#### **GPS POSTPROCESSING OPTIONS**

- GPS Pathfinder Office software
- Trimble GPS Analyst<sup>™</sup> extension for ESRI ArcGIS Desktop software

Specifications subject to change without notice.

# 😢 Bluetooth

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or Bluetooth technology for connection to

#### SUPPORTED BACKGROUND FILE FORMATS

- Trimble SSF format (.ssf, .cor, .imp)
- ESRI Shapefiles (.shp)

#### **Raster (image) formats**

- JPEG (.jpg)
- JPEG 2000 (.jp2, .j2c)
- MrSID (.sid)
- TIFF (.tif) Windows bitmap (.bmp)