





GIS PRODUCT COMPARISON





ACCURATE GIS DATA COLLECTION
WHERE AND WHEN YOU NEED IT






GIS PRODUCT COMPARISON

HANDHELD COMPUTERS WITH GNSS	GeoExplorer 7 series 	GeoExplorer 5 series 
DGNSS accuracy postprocessed*	50 cm + 1 ppm (Code) 10 cm + 1 ppm (H-Star™) 1 cm + 1 ppm (Centimeter)	<1 m
DGNSS accuracy real-time*	<100 cm (SBAS) 75 cm + 1 ppm (Code) 10 cm + 1 ppm (H-Star) 1 cm + 1 ppm (Centimeter)	<1 m
H-Star technology-capable	Yes	No
GLONASS-capable	Yes	Yes
Galileo-capable	Yes	No
QZSS-capable	Yes	No
BeiDou-capable	Yes	No
EVEREST™ multipath rejection	Yes	Yes
Floodlight™-capable	Yes	No
Integrated SBAS	Yes	Yes
Integrated OmniSTAR	No	No
NMEA output	Yes	Yes
RTCM input	Yes	Yes
Operating system	Windows® Embedded Handheld Professional 6.5	Windows Embedded Handheld 6.5
Processor	1.0 GHz OMAP DM3730	Marvell® PXA 320
Memory (RAM)	256 MB	256 MB
Screen details	10.7 cm / 4.2", color touch screen, 480x640 px	8.9 cm / 3.5", color touch screen, 240x320 px
Data storage	4 GB	2 GB
Expansion slots	1 (SD / SDHC)	1 (SD / SDHC)
Alphanumeric data entry	Soft input panel (SIP) on screen keyboard	Soft input panel (SIP) on screen keyboard
Integrated Barcode scanner	No	No
Integrated Bluetooth	Yes	Yes
Integrated Wi-Fi	Yes	No
Integrated camera	5 MP	3 MP
Orientation sensors	Yes	No
Integrated rangefinder	Yes	No
Cellular modem	Yes (GSM/CDMA)	Yes (Optional)
Cellular voice capability	No	No
Weight	963 g (2.12 lb) 1080 g (2.38 lb) (incl. rangefinder)	0.64 kg / 1.41 lb
Battery life	Up to 10.5 hours: Internal GNSS, and backlight	8 hours (GNSS on)
Ruggedness	Withstands 1.2 m / 4 ft drop	Withstands 1.2 m / 4 ft drop
Environmental	Dust-proof and resistant to heavy wind-driven rain per IP65 standard	Wind-driven rain and dust-resistant per IP54 standard
Operating temperature	-20 °C to 60 °C / -4 °F to 140 °F	-20 °C to 60 °C / -4 °F to 140 °F

GNSS RECEIVERS	Pro 6H receiver 	Pro 6T receiver 	GPS Pathfinder® ProXRT receiver 
DGNSS accuracy postprocessed*	10 cm	50 cm	10 cm
DGNSS accuracy real-time*	10 cm	<1 m	10 / 30 cm
H-Star technology-capable	Yes	No	Yes
GLONASS-capable	Yes	Yes (Optional via Floodlight™)	Yes (Optional)
EVEREST multipath rejection	Yes	Yes	Yes
Integrated GNSS receiver and antenna	Yes	Yes	No, Tornado™ antenna
Integrated SBAS	Yes	Yes	Yes
Integrated OmniSTAR	No	No	Yes (VBS, XP/G2, or HP)
NMEA output	Yes (Optional)	Yes (Optional)	Yes

Juno® 5 series 	Juno 3 series 	Nomad® 900G series 	Yuma® 2 rugged tablet computer 
2–4 m	1–3 m	1–3 m	2–4 m
2–4 m (RTCM, SBAS) 1–2 m (Enhanced GPS handhelds with WAAS/EGNOS)	2–5 m	2–5 m	2–4 m (RTCM, SBAS) 1–2 m (Enhanced GPS tablets with WAAS/EGNOS)
No	No	No	No
No	No	No	No
No	No	No	No
No	No	No	No
No	No	No	No
No	No	No	No
No	No	No	No
Yes	Yes	Yes	Yes
No	No	No	No
Yes	Yes	Yes	Yes
Yes (DGPS, RTCM 2.3)	No	No	Yes (DGPS, RTCM 2.3)
Windows Embedded Handheld Professional 6.5. Android 4.1 (selected configurations)	Windows Embedded Handheld Professional 6.5	Windows Mobile® 6.1	Windows 7 Professional
800 MHz (Juno 5B) / 1.0 GHz (Juno 5D) / 1.0 GHz (Juno 5B/5D Barcode, Enhanced GPS, or RFID handhelds) OMAP DM3730	800 MHz Samsung processor	806 MHz Xscale processor	1.6 GHz Intel Atom N2600 dual core processor
512 MB	256 MB	128 MB	4 GB DDR2 DRAM
10.9 cm / 4.3", WVGA TFT, 480x800 px	8.9 cm / 3.5", color touch screen, 240x320 px	8.9 cm / 3.5", color touch screen, 480x640 px	17.8 cm / 7", color touch screen, 1024x600 px
8 GB (Juno 5B) / 16 GB (Juno 5D) / 32 GB (Juno 5B/5D Barcode, Enhanced GPS, or RFID handhelds)	2 GB	6 GB	64 GB or 128 GB SSD 128 GB with Enhanced GPS tablets
1 (microSDHC)	1 (microSDHC)	1 (SD/SDIO) all models / 900GLD (+USB)	No
Soft input panel (SIP) on screen keyboard	Soft input panel (SIP) on screen keyboard	Soft input panel (SIP) on screen keyboard, Transcriber handwriting recognition, Numeric keypad	Soft input panel (SIP) on screen keyboard, Transcriber handwriting recognition, Optional keyboard accessory
Yes (Barcode handhelds)	No	Yes (900GLE and 900GXE)	No
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
8 MP with flash	5 MP	5 MP (900GLC, 900GLE, & 900GXE only)	5 MP, outward facing
No	No	No	No
No	No	No	No
Yes (Juno 5D only)	Yes (Juno 3D only)	Integrated in 900GXE model	Integrated 3.75G WWAN data modem (Optional)
Yes (Juno 5D only)	Yes (Juno 3D only)	No	No
0.4 to 0.55 kg (0.84 to 1.21 lb) depending on configuration	0.31 kg / 0.69 lb	0.56 kg / 1.2 lb	1.2 kg / 2.6 lb
8 hours	10 hours: Internal GPS, and backlight	15 hours	5+ hours standard battery 10+ hours extended battery
Withstands 1.2 m / 4 ft drop	Withstands 1.2 m / 4 ft drop	Withstands 1.2 m / 4 ft drop	Withstands 1.2 m / 4 ft drop
Dust-proof and resistant to heavy wind-driven rain per IP65 standard	Wind-driven rain and dust-resistant per IP54 standard	Impervious to dust and submersible in water for 4 hours per IP68 standard	Dust-proof and resistant to heavy wind-driven rain per IP65 standard
-30 °C to 60 °C / -22 °F to 140 °F	-20 °C to 60 °C / -4 °F to 140 °F	-30 °C to 60 °C / -22 °F to 140 °F	-30 °C to 60 °C / -22 °F to 140 °F

GNSS RECEIVERS	Pro 6H receiver 	Pro 6T receiver 	GPS Pathfinder® ProXRT receiver 
RTCM input	Yes	Yes	Yes
Integrated Bluetooth	Yes	Yes	Yes
Weight	1.04 kg / 2.3 lbs	1.04 kg / 2.3 lbs	1.55 kg / 3.42 lbs
Battery life	> 12 hours	> 12 hours	13 hours (varies with temperature)
Ruggedness	1.2 m / 4 ft drop to plywood over concrete	1.2 m / 4 ft drop to plywood over concrete	Withstands 1 m / 3.28 ft drop
Environmental	IP65	IP65	IP67
Operating temperature	-20 °C to 60 °C / -4 °F to 140 °F	-20 °C to 60 °C / -4 °F to 140 °F	-40 °C to +70 °C / -4 °F to 158 °F

* REFER TO PRODUCT DATASHEET AND FAQS FOR FULL DETAILS. ACCURACY SPECIFICATIONS APPLY TO THE LATEST FIELD AND OFFICE SOFTWARE VERSIONS ONLY.

FIELD SOFTWARE	TerraSync™ Standard & Professional edition	TerraSync Centimeter edition	Trimble Positions™ Mobile extension	Trimble Positions ArcPad extension	Trimble GPScorrect™ extension
Data collection	Yes	Yes	Yes	Yes	Yes
Data maintenance	Yes (Professional only)	Yes	Yes	Yes	Yes
QuickPoint™ data collection mode	Yes	Yes	No	No	No
Code phase data collection	Yes	Yes	Yes	Yes	Yes
Data collection for DeltaPhase™ postprocessing	Yes	Yes	Yes	Yes	Yes
H-Star data collection	Yes	Yes	Yes	Yes	Yes
Carrier phase data collection	Yes	Yes	Yes	Yes	Yes
RTK data collection	No	Yes	No	No	No
Navigation	Yes	Yes	Available via ArcGIS for Windows Mobile	Available via Esri ArcPad	Available via Esri ArcPad
Customization	With TerraSync Studio	With TerraSync Studio	Trimble Positions Mobile Project Center extension	Available via Esri ArcPad	Available via Esri ArcPad
Data storage format	Trimble SSF	Trimble SSF	Trimble Positions database and Esri Mobile Cache	Esri ArcPad Shapefile or AXF file and Trimble Positions ArcPad extension SSF	Esri ArcPad Shapefile or AXF file and Trimble GPScorrect SSF
Field devices	Windows XP, Windows Vista, Windows 7, Windows Mobile version 6, 6.1, 6.5, and 5.0 including all current Trimble Mapping & GIS handhelds		Windows Mobile 6, 6.1, 6.5, Windows Embedded Handheld 6.5	Windows 7, Windows Mobile 6, 6.1, 6.5, Windows Embedded Handheld 6.5	Windows XP, Windows Vista, Windows 7, Windows Mobile version 6, 6.1, 6.5, and 5.0
Supported GNSS receivers	Trimble Geo 7 (Centimeter edition not supported), Juno 5B/5D/3B/3D/SD handhelds, Nomad 900G series, Pro 6T/6H receivers, GPS Pathfinder ProXRT receiver	Those supported by TerraSync Professional edition, plus Trimble 5800 (Model 2), Trimble R4, R6 (Models 1 and 2), R8 (Models 2 and 3) receivers	Trimble Geo 7 (Centimeter edition not supported)/5 series, Juno 5B/5D/3B/3D/SD handhelds, Nomad 900G series, Pro 6T/6H receivers	Trimble Geo 7 (Centimeter edition not supported)/5 series, Juno 5B/5D/3B/3D/SD handhelds, Nomad 900G series, Yuma 2 tablet, Pro 6T/6H receivers, GPS Pathfinder ProXRT receiver	Trimble Juno 3B/3D/SD handhelds, Nomad 900G series, Pro 6T/6H receivers, GPS Pathfinder ProXRT receiver
Coordinate system support	Latitude/Longitude (WGS 84), U.S. State Plane 27 (NADCON - Conus), U.S. State Plane 83 (NAD - Conus), UTM, and hundreds of additional systems are supported		Esri ArcGIS projection engine	Esri ArcPad projection engine	Esri ArcPad projection engine
External sensor support	Yes (Professional only)	Yes	No	No	No
Laser rangefinder support	Yes (Professional only)	Yes	Yes	Yes	Yes
IMS support	Yes (Professional only)	Yes	Online background maps from ArcGIS for Server	Yes	Yes
Background layers	Professional edition only: MrSID (SID), JPEG (JPG) and JPEG2000 (JP2 and J2C), ECW, Bitmap (BMP), TIFF (TIF), Esri Shapefile (SHP), Trimble SSF (SSF)	MrSID (SID), JPEG (JPG) and JPEG2000 (JP2 and J2C), ECW, Bitmap (BMP), TIFF (TIF), Esri Shapefile (SHP), Trimble SSF (SSF)	Esri ArcGIS supported vector and raster formats	Esri ArcPad supported vector and raster formats	Esri ArcPad supported vector and raster formats
Simultaneous feature collection	Yes (Points during line/area collection)	Yes (Points during line/area collection)	No	Yes (Points during polyline/polygon collection)	Yes (Points during polyline/polygon collection)
Offsets	Yes	Yes	Yes	Yes	Yes
Graphical attribute pick lists	Yes	Yes	No	No	No
Advanced GNSS data symbology	No	No	Yes	No	No
Mission planning	Yes	Yes	Download: www.trimble.com/planningsoftware.shtml or view online www.trimble.com/GNSSPlanningOnline/	Yes	Yes
VRS support	Yes	Yes	Yes	Yes	Yes

OFFICE SOFTWARE	GPS Pathfinder® Office software	Trimble Positions Desktop add-in	Trimble GPS Analyst extension
Differential correction	Code phase, carrier phase, DeltaPhase, and H-Star processing	Code phase, carrier phase, DeltaPhase, and H-Star data processing	Code phase, carrier phase, DeltaPhase, and H-Star data processing
ShapeCorrect	Yes	Not applicable	Not applicable
Batch processing	Yes	No	No
Coordinate system support	Latitude/Longitude (WGS 84), U.S. State Plane 27 (NADCON - Conus), U.S. State Plane 83 (NAD - Conus), UTM, and hundreds of additional systems are supported	Esri ArcGIS projection engine	Esri ArcGIS projection engine
Data export	AutoCAD DXF, dBASE, Esri Shapefile, Esri File Geodatabase, KML/KMZ (Google Earth mapping service), MapInfo MIF, Microsoft Access MDB, MicroStation DGN, configurable ASCII. Additional formats supported via Trimble SSF and DDF data format extensions for FME	Integrated with Esri Personal, File, and Enterprise SDE Geodatabases, and additional export formats supported in Esri ArcGIS software	Trimble SSF, Trimble Data Dictionary File (DDF), and additional export formats supported in Esri ArcGIS software
Data import	AutoCAD DXF, dBASE, Esri Shapefile, Esri File Geodatabase, MapInfo MIF, Microsoft Access MDB. Additional formats supported via Trimble SSF and DDF data format extensions for FME	Integrated with Esri Personal, File, and Enterprise SDE Geodatabases, and additional import formats supported in Esri ArcGIS software. Esri ArcPad Shapefile or AXF file and Trimble Positions ArcPad extension SSF	Trimble SSF, schema from Trimble DDF, Esri ArcPad Shapefile or AXF file and Trimble GPScorrect SSF
Data dictionary creation	Yes	Create feature class schema	Create feature class schema
Data storage format	Trimble SSF	Personal, File, and Enterprise SDE Geodatabase	Personal Geodatabase
Customization	Automation interfaces from Differential Correction and Export utilities only	No	Available via ArcObjects
Map display/editing	Yes	Esri ArcGIS map and editing engines	Esri ArcGIS map and editing engines
Advanced GNSS data symbology	No	Yes	Yes
Feature rebuild	No	Yes	Yes
Feature verification	Yes	Yes	Yes
Mission planning	Download from http://www.trimble.com/planningsoftware.shtml or view online at http://www.trimble.com/GNSSPlanningOnline/		
Field software support	TerraSync software (Standard, Professional, or Centimeter), Trimble Positions ArcPad extension, Trimble GPScorrect extension for Esri ArcPad, and applications developed with the GPS Pathfinder Field toolkit	Trimble Positions Mobile extension, Trimble Positions ArcPad extension, and third-party applications built on the Trimble Positions toolkit	Trimble GPS Analyst extension field tools, TerraSync software (Standard, Professional, or Centimeter), Trimble GPScorrect extension for Esri ArcPad, and applications developed with the GPS Pathfinder Field toolkit

NORTH AMERICA
Trimble Navigation Limited
10368 Westmoor Drive
Westminster CO 80021
USA

EUROPE
Trimble Germany GmbH
Am Prime Parc 11
65479 Raunheim
GERMANY
+49-6142-2100-0 Phone
+49-6142-2100-550 Fax

ASIA-PACIFIC
Trimble Navigation
Singapore Pty Limited
80 Marine Parade Road
#22-06, Parkway Parade
Singapore 449269
SINGAPORE
+65-6348-2212 Phone
+65-6348-2232 Fax



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