











# 11 GPS Receiver Comparisons

	 GlobalSat GPS card	 Juno® and Nomad® 900G series	 3000 Series Geo XM™	 ProXT™	 3000 Series Geo XT™	 6000 Series Geo XT™	 ProXH™	 3000 Series Geo XH™	 6000 Series Geo XH™	 Pro XRT
<b>Post-Processed Accuracy</b>	N/A <sup>1</sup>	1-3 m <sup>2</sup> + 1 ppm <sup>3</sup>	1-3m + 1 ppm <sup>3</sup>	50 cm <sup>2</sup> + 1ppm <sup>3</sup>	50 cm <sup>2</sup> + 1ppm <sup>3</sup>	50 cm + 1ppm <sup>3</sup>	10-50 cm <sup>5</sup> + 1ppm <sup>3</sup>	10-50 cm <sup>5</sup> + 1ppm <sup>3</sup>	10-50 cm <sup>5</sup> + 1ppm <sup>3</sup>	10-50 cm <sup>5</sup> + 1ppm <sup>3</sup>
<b>Real-Time DGPS Capable</b>	SBAS <sup>4</sup>	SBAS <sup>4</sup>	SBAS <sup>4</sup> or External Source <sup>6</sup>	SBAS <sup>4</sup> or External Source <sup>6</sup>	SBAS <sup>4</sup> or External Source <sup>6</sup>	SBAS <sup>4</sup> or External Source <sup>6</sup>	SBAS <sup>4</sup> or External Source <sup>6</sup>	SBAS <sup>4</sup> or External Source <sup>6</sup>	SBAS <sup>4</sup> or External Source <sup>6</sup>	SBAS <sup>4</sup> , External Source <sup>6</sup> , Omnistar <sup>8</sup>
<b>Real-time Accuracy</b>	2-5 m	2-5 m	1-3 m	Submeter	Submeter	75 cm to 1 m	Submeter	10 cm <sup>7</sup> to 1 m	10 cm to 1 m	10 cm to 1 m
<b>EVEREST™ multipath rejection technology</b>	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES
<b>GLONASS tracking</b>	NO	NO	NO	NO	NO	Optional	NO	NO	YES	Optional
<b>Floodlight<sup>8</sup> Technology</b>	NO	NO	NO	NO	NO	Optional	NO	NO	YES	NO
<b>H-Star™ Technology</b>	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES
<b>Channels</b>	12, L1 code	12, L1 code	14, 12 L1 code, 2 SBAS	12, L1 code and carrier	14, 12 L1 code carrier, 2 SBAS	220, L1 code and carrier, SBAS	12, L1 code and carrier, L2 carrier, SBAS	26, L1 code and carrier, L2 carrier, SBAS	220, L1 code carrier, L2 carrier SBAS	220, L1 code and carrier, L2 carrier, SBAS, Omnistar
<b>External Antenna</b>	Yes	Optional on Juno only	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Standard
<b>Internal Antenna</b>	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	NO
<b>Supported Data Collection Software</b>	ArcPad®	TerraSync™, ArcPad®, ArcPad® + GPSCorrect™	TerraSync, ArcPad, ArcPad + GPSCorrect	TerraSync, ArcPad, ArcPad + GPSCorrect	TerraSync, ArcPad, ArcPad + GPSCorrect	TerraSync or ArcPad + GPSCorrect	TerraSync, ArcPad, ArcPad + GPSCorrect	TerraSync, ArcPad, ArcPad + GPSCorrect	TerraSync or ArcPad + GPSCorrect	TerraSync or ArcPad + GPSCorrect
<b>NMEA Output</b>	YES	YES	YES	YES	YES	Optional upgrade	YES	YES	Optional upgrade	Optional upgrade
<b>Price<sup>9</sup></b>	\$115 <sup>10</sup>	\$749-\$2,849	\$1,995	\$2,495 <sup>10</sup>	\$3,995	\$4,995-\$6,500	\$3,495 <sup>10</sup>	\$5,695	\$7,695-\$8,500	\$5,995-\$7,900 <sup>10</sup>



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<sup>1</sup> The GlobalSat card outputs NMEA data only and cannot be post-processed.

<sup>2</sup> Requires Trimble® DeltaPhase technology, as supported in the GPS Pathfinder® Office software version 4.20 or later, or the GPS Analyst® Extension for Esri® ArcGIS® Desktop software version 2.20 or later.

<sup>3</sup> The distance between the base station and the rover affects accuracy. There is a degradation of 1 part per million (1ppm) as the distance between the base station and rover increases. Therefore, one millimeter of degradation occurs for every kilometer between the base and rover.

<sup>4</sup> SBAS (Satellite Based Augmentation System). Includes WAAS (Wide Area Augmentation System) available in North America only, EGNOS (European Geostationary Navigation Overlay System) available in Europe only, and MSAS, available in Japan.

<sup>5</sup> The following factors increase the availability of 10 cm accuracy after H-Star™ post-processing: use of optional external antennas, longer elapsed time tracking uninterrupted L1/L2 carrier phase data, tracking of more GPS or GLONASS satellites with L2 measurements, shorter distance to the base station(s), and use of more (than one) base stations for post-processing.

<sup>6</sup> External real-time correction source includes Beacon, VRS or real-time connection to a local base station.

Requires H-Star data to be collected for up to 2 minutes. Requires a minimum of 3 good quality dual frequency reference stations within 200 km, or one good quality reference station within 80 km. With one reference station, accuracy degrades by 1ppm beyond 80km. Code processing reduces accuracy to 50 cm.

<sup>7</sup> Requires optional Zephyr™ or Tomado™ antenna, VRS or base station less than 30 km away, and data collected with Trimble software. H-Star specified accuracy is typically achieved within 2 minutes.

<sup>8</sup> Floodlight satellite shadow reduction technology allows receivers to compute positions even with very weak satellite signals. Floodlight technology increases the number of positions that are gathered in difficult locations and boosts accuracy in those places where normally only low accuracy data is available.

<sup>9</sup> Price does not include cost of Pathfinder® Office or GPS Analyst™ software (\$1,995, bundled with TerraSync™ Pro \$2,695). TerraSync Professional is \$1,195, TerraSync Standard for \$295 can be used instead. Standard version does not include Data Update, External Sensor support, Laser Offsets, or Background Map.

<sup>10</sup> Price of GlobalSat Card, XRT, XT or XH does not include cost of data collector. Trimble Nomad®, Trimble Recon® or Juniper Systems® Archer®, Allegro™ or other CE device will work with these receivers.

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