

# THINGS TO CONSIDER WHEN CHOOSING A GNSS RECEIVER

How often is a georeferenced position necessary? | How are you getting paid? | What is your budget?  
Does your scope include a geospatial accuracy requirement? | What equipment do you have already?

Receiver and Manufacturer	Strengths	Weaknesses	MSRP, Accuracy, Size and Weight
 <p>Trimble R1</p>	<ul style="list-style-type: none"> <li>Simple</li> <li>Reliable accuracy</li> <li>Compact</li> <li>Can be clipped on vest</li> <li>One button operation</li> <li>Bluetooth</li> <li>iOS, Android and Windows 10</li> </ul>	<ul style="list-style-type: none"> <li>Must be positioned vertically</li> <li>Small antenna surface area</li> </ul>	<ul style="list-style-type: none"> <li>R1 - \$2,495</li> <li>Accuracy - 50cm - 1m</li> <li>4.4 x 2.7 x 1.0 inches</li> <li>0.4 lbs</li> <li>-4 F to +140 F</li> </ul>
 <p>Trimble TDC600</p>	<ul style="list-style-type: none"> <li>Very rugged</li> <li>All Android smartphone features</li> <li>6" high res screen (daylight readable)</li> <li>All day high capacity user replaceable battery</li> <li>Bigger than smartphone, smaller than a tablet</li> </ul>	<ul style="list-style-type: none"> <li>&gt;2m to 1.5m accuracy</li> <li>Currently not Verizon compatible</li> </ul>	<ul style="list-style-type: none"> <li>TDC600 - \$1495</li> <li>Accuracy 1.5m - 2m</li> <li>7.7 x 3.6 x 0.67 inches</li> <li>0.9 lbs</li> <li>-4 F to +131 F</li> </ul>
 <p>Trimble Catalyst</p>	<ul style="list-style-type: none"> <li>Scalable accuracy based on monthly subscription</li> <li>Small size</li> <li>No batteries</li> <li>Low cost</li> </ul>	<ul style="list-style-type: none"> <li>Wired connection to data collector</li> <li>Tablet processor must be 1.5ghz or faster</li> <li>Next generation technology means more challenging troubleshooting</li> <li>Currently, Android only</li> </ul>	<ul style="list-style-type: none"> <li>Catalyst DA1 Antenna - \$350</li> <li>Monthly subscription rates and accuracy                             <ul style="list-style-type: none"> <li>\$40 - 1 Meter</li> <li>\$120 - Sub Meter</li> <li>\$200 - up to 10cm</li> <li>\$350 - 1-2cm</li> </ul> </li> <li>5.1 x 2.4 inches</li> <li>0.7 lbs</li> </ul>
 <p>Juniper Geode</p>	<ul style="list-style-type: none"> <li>Large antenna area</li> <li>Maintains precision while moving and under canopy</li> <li>Bluetooth</li> <li>iOS, Android, and Windows 10</li> </ul>	<ul style="list-style-type: none"> <li>Larger</li> <li>Requires shoulder/back pack or pole mount</li> </ul>	<ul style="list-style-type: none"> <li>Geode - \$1995</li> <li>Accuracy 30cm - 1m</li> <li>4.4 x 4.4 x 1.7 inches</li> <li>0.8 lbs</li> </ul>
 <p>Juniper Cedar Tree 8 (Data Collector)</p>	<ul style="list-style-type: none"> <li>Waterproof and dustproof</li> <li>User replaceable battery</li> <li>Field ready 8" high res sunlight readable screen</li> <li>Android 8.1</li> </ul>	<ul style="list-style-type: none"> <li>2-3m accuracy</li> <li>Sub-meter capable with added antenna</li> </ul>	<ul style="list-style-type: none"> <li>CT8 tablet - \$999</li> <li>Accuracy - 2-3m</li> <li>9.2 x 5.7 x .05 inches</li> <li>1.2 lbs</li> </ul>

Our purpose is to provide the strengths and weaknesses of each device and guide readers to informed decisions about the receiver best suited to their specific and unique project requirements. The manufacturers of these devices maintain the highest quality and ensure their products meet the specifications listed. Each receiver in this test has a wide range of capabilities and uses.

Read full white paper at <https://bit.ly/2yXV21W>