GPS Accuracy in Onsight Connect

Frequently Asked Questions

This information represents shared experiences, resolutions, and best practices for resolving common questions regarding Global Positioning Systems (GPS) and their accuracy provided by customers.

GPS Signal Accuracy

Question: What factors can affect GPS accuracy?

Answer: The GPS signal accuracy displayed in Onsight Connect will depend on several factors. Some of these are the device GPS receiver design features and quality, satellite geometry, atmospheric conditions, and signal blockage.

Question: What is the range for GPS accuracy?

Answer: On a clear day with an open sky, GPS-enabled smartphones can be accurate up to 16 ft (4.9 m). Advanced smartphones can improve GPS accuracy up to 9ft (2.82m).

Note: These results are for standard optimal conditions when there are no visible obstructions.

GPS Receiver Design Features

Question: Are all GPS receivers considered the same quality?

Answer: GPS receiver design features and quality affect the accuracy of the Onsight displayed location. Smartphones such as Android and iPhone Operating System (iOS) devices have a sophisticated **Location Services** option for faster determination and display of GPS coordinates when compared to wearable devices like RealWear.

Device Challenges that Affect Location Services & GPS Accuracy

Question: What device challenges can affect location services and GPS accuracy?

Answer: Device challenges that can affect location services and GPS accuracy include:

- The quality of the GPS receiver in the device.
- The network connection.
- If power saving mode is enabled.
- If the phone is damaged.
- The use of a thicker phone case can impede GPS signals.

Question: What factors can degrade GPS positioning accuracy?

Answer: Common factors that can degrade GPS positioning accuracy include:

- Satellite signal blockage due to buildings, bridges, trees, mountains, clothing, human body etc.
- Indoor or underground use.
- Signals reflecting off of buildings or walls create multiple paths for the signal to travel.

Smartphone GPS Enhancement

Question: Can smartphone GPS accuracy be improved?

Answer: Smartphone GPS accuracy can improve providing you follow the manufacturer's recommendations for the device. Refer to:

- Manage your Android device's location settings - Android Help (google.com)
- About privacy and Location Services in iOS and iPad Operating System (iPadOS) - Apple Support
- Realwear devices: HMT, HMT-1Z1, Navigator 500 etc. Speak "***My Programs*** **>** ***Settings*** **>** ***Page Down***" followed by "***Location*** **>** ***Advanced Accelerated Location***" to enable as **ON**.

Related information

GPS.gov — What is a GPS?
INCOGNIA — The Authentication Reference — All you need to know about location technology [The Ultimate Guide]
FIXWILL — How Accurate is GPS on Android?
Apple Support — About privacy and Location Services in iOS and iPadOS
Google Maps Help — Find & improve your location's accuracy

Notes:

Related information

Support
Just-in-Time Training Materials