

Penmap for Android - GNSS Quality Settings

Trimble Land Administration

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When collecting data, the color of the GNSS position cursor on the map indicates the quality level of the current position:

Color	Meaning	Penmap behavior
Green	Within the defined quality limit	Measurements start immediately after you tap the GNSS method button.
Orange	Warning limit	You are prompted to confirm you want to log the position.
Red	Outside the quality limit	Measurement is not possible.

You can select two parameters to control the color code settings:

Required solution status: Uncorrected, DGPS, Float, Fixed

Required 2D Accuracy in Meters

The following document describes how the quality setting for GNSS is working.

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https://geospatial.trimble.com/

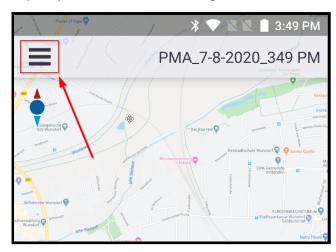
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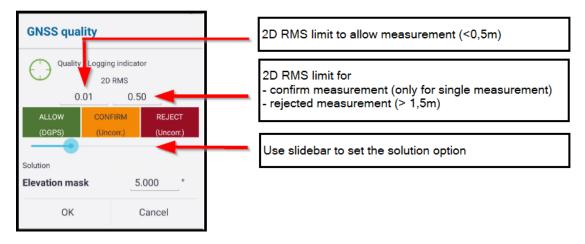


Set quality requirements

To set the quality of GNSS measurements go to the main menu on the left upper side on the screen.



Open GNSS | Quality.



Required 2D Accuracy in Meters

- The left value above the three coloured indicators is the maximum of tolerance for measurements accepted without question.
- The right value above the three coloured indicators is the maximum of tolerance for measurements accepted after permission for single measurement.
- The measurements triggered with a tolerance lower than the right value are automatically rejected.

Required solution status: Uncorrected, DGPS, Float, Fixed

• The values RTK, Float, DGPS and Uncorr. define what correction service solution is needed for accepting measurements, having to confirm or reject them.

Use the slider bar to choose between 5 pre-defined settings to control the solution status options. You can also manually change the suggested 2D accuracy thresholds by clicking on the values. Your updated parameters are stored as your new Penmap configuration and are used every time you start Penmap.

These values are presented as a green, yellow or red GNSS measurement cursor during the activity of GNSS measurement if both criterias are fulfilled.

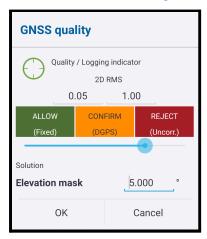


Note: The warning limit (yellow) is only available in single measurement mode. For all other collection methods (average, continuous measurement by time, continuous measurement by distance) the measurement is rejected.

Measurement for average, continuous measurement by time, continuous measurement by distance is accepted in the green limit only.

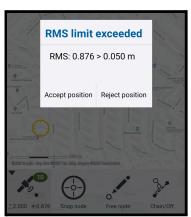
Enter the elevation (degrees above the horizon) below which a satellite will not be used. Satellites that are too close to the horizon are subject to interference from objects on the ground.

Let's take an example:



Green: cursor will be green having an accuracy better than 0,05m and a Fixed solution

Yellow: having an accuracy better than 1,0 m and a DGPS solution the cursor will be shown yellow. In single measurement the following message appears in this case and you can make the decision to accept or reject the position.



For all other collection methods (average, continuous measurement by time, continuous measurement by distance) the measurement is rejected.

Red: If the accuracy is bigger than 1,0 m or the solution is uncorrected the measurement is rejected

Contact

For more information or questions contact the Trimble Penmap community.

https://community.trimble.com/groups/penmap-for-andriod

