## **My Position**

Share your location, easily.

## 1. Introduction

**My Position** determines the current location by GPS and shows address data and GPS coordinates including height above sea-level.

For showing country-specific **address info**, it uses the Nominatim Reverse Geocoding service of OpenStreetMap. This makes sure that it works without Google services and no address data is transferred to data collectors.

The application simplifies the task of **sharing your location** data with your contacts by using the available email or messaging apps.

Your **location** may also be shown **on a map** either local (if a suitable mapping app is installed and the default setting of Google Maps is changed\*) or by internet browser on **OpenStreetMap**. It shows a country-specific representation of address info and introduces localized strings and number formats (German, English).

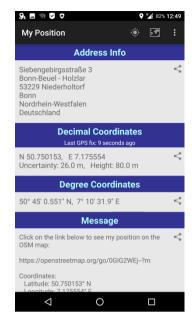


Fig. 1: Main view

Additionally, this application also includes a **tool** to help **converting** between WGS84 decimal coordinate format and degree-minutes-seconds coordinate format.

The app is licensed under GNU GPLv2 or later. (See https://www.gnu.org/licenses/gpl-3.0)

## 2. Set up

Before initial use you should look at the **Settings** page (Fig. 2) and set up a **valid email address** for the Nominatim Reverse Geocoding service of OpenStreetMap. This is optional, but for a reliable service and for the reason of protection against abuse it is demanded. Especially, when the service is used on a regular basis (for details see <a href="http://wiki.openstreetmap.org/wiki/Nominatim#Reverse Geocoding">http://wiki.openstreetmap.org/wiki/Nominatim#Reverse Geocoding</a>).

Depending on your needs and pretensions you may set an **update distance** from 5 to 1000 m after that the GPS should update the location data. Remind: The shorter the more power it will consume. For hiking a good value would be 20 m, for bicycle riders 100 m.

The current **location** can be shown **on a map**. Untagged, it will show the position online on OpenStreetMap in your browser. Tagged, it tries to show the current position on an installed mapping app like Locus, OruxMaps or OSMAnd. But rather, determined by the default app geo-link settings of the smartphone, it will show the position on Google Maps. \*)

You may set the app to portrait or landscape mode by the corresponding option. A fixed alignment mode avoids unexpected and disturbing toggling of the screen.

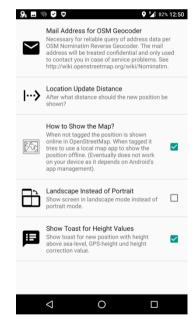


Fig. 2: Settings

As the GPS signal delivers height values of an idealist geoid that might differ much from the commonly used height above sea level, the last option allows to set a toast message showing up that informs about the different height values (sea level height, GPS height and local correction value, see at the lower part of Fig. 3).

<sup>\*)</sup> To change the default from Google Maps to a preferred mapping app, open the settings on your phone, tap Apps, find Maps and select Clear defaults.

Head back to My Position and call Show Map. Now you'll be asked which application to use. Pick the one you prefer, and tap 'This time' to test it. Next time you may select 'Always' to make sure your preferred app opens by default.

## 3. Usage

After starting the app it tries to get the GPS satellites fixes (if not done already by another app). As soon as it gets the position it shows the coordinates with uncertainty and height above sea level. (It may take some time for more precise values.)

Then it tries to get the **address info** of the position by requesting the Nominatim service of OpenStreetMap. If there is no Internet access the Address view area shows: "No Address data!". The address info is shown partly in a country-specific representation (at, ch, de, fr, it, rest of the world).

The coordinates are shown in two formats: WGS84 **decimal** (dd.dddddd) coordinate format and **degree**-minutes-seconds (dd° mm' ss.sss") coordinate format.

The **Message** area shows a prepared message that could be sent to someone you want to inform about your location. It contains all the available information and a link that shows the position on OpenStreetMap.

The action bar shows three icons representing **Update Position**, **Show Position on Map** and **App Menu** (Fig. 3).

My Position

Address Info

Siebengebirgsstraße 3
Bonn-Beuel - Holzlar
53229 Niederholtorf
Bonn
Nordrhein-Westfalen
Deutschland

Decimal Coordinates
Last GPS fix: 0 seconds ago

N 50.750153, E 7.175554
Uncertainty: 26.0 m, Height: 80.0 m

Degree Coordinates

50° 45' 0.551" N, 7° 10' 31.9" E

Message

Click on the OSM map: Height above Sea-level: 84.0
Height from GPS: 133.0
Https://oper

Coordinates:
Latitude: 50.750153" N
Loopolitude: 7.175554" E

Fig. 3: Toast with height info

Clicking **Update Position** triggers the GPS receiver to update the position.

Clicking **Show Position on Map** tries to show the current position either on an offline map by an installed mapping app or shows it online on OpenStreetMap depending on what you selected in Settings.

From the **App Menu** (Fig. 4) you access the **Settings** view (see 2. Set up and Fig. 2), a coordinates **Conversion** calculator (Fig. 5) and the **About** page (Fig. 6) with version number, short app description, legal and license info as well as the app history.

If you leave MyPosition GPS is switched off (if not still in use by another app).

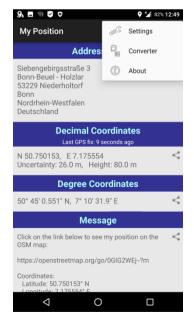


Fig. 4: App Menu



Fig. 5: Converter

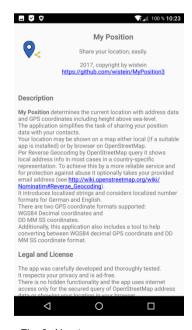


Fig. 6: About page