

Network Cell Info



Manual v.2

by WiLysis, Inc. <http://wilysis.com>

<https://play.google.com/store/apps/details?id=com.wilysis.cellinfo>

<https://play.google.com/store/apps/details?id=com.wilysis.cellinfoLite>

<http://wilysis.com/networkcellinfo/>

Gauge Tab (1/2)

This is the starting tab showing essential network signal strength and information for the serving cell, as well as the neighbor cells.

The top gauge "Serving Cell" provides the signal strength about the cell you are currently connected to. The other gauges "Neighbor #x" are the signal strengths of the neighbor cells you are most likely to switch to, if you move or if the network judges so.

Additionally this tab provides info on WiFi, and the second SIM of dual SIM (Android 5+) phones (if enabled from the app settings).



- (1) App close, App settings, and overflow button for feedback etc.
- (2) Available tabs (functionalities)
- (3) Signal level, Wireless network type, and Network provider name
- (4) SDR: Service Status, Mobile Data and Roaming ON/OFF indications
- (5) Signal Strength Gauge and Signal Strength and Quality "LCDs"
- (6) Serving cell identification details
- (7) Neighbor cell gauges, Band info
- (8) Tapping on individual gauge you can turn it off (CPU easing)
- (9) WiFi signals information

Note: If some field shows "-" or is empty, it means that Device/Android doesn't provide that info.

Note: You can find all the acronyms, under the app settings / about / FAQ.

Gauge Tab (2/2)



- (1) SIM1 cells' information
- (2) SIM2 cells' information ** (for dual SIM phones with Android > 5)
- (3) WiFi network information
- (4) Band information (only for Android 7)

Note: Band info is available only in Android 7 devices, because Android introduced this feature in Android 7 Release.

Note: You can click any gauge to turn it off, to save CPU power.

** Dual SIM functionality is available in Android 5+ devices or in devices with Android 4.2+ having MediaTek processor. This is Android/Device limitation.

Raw Tab



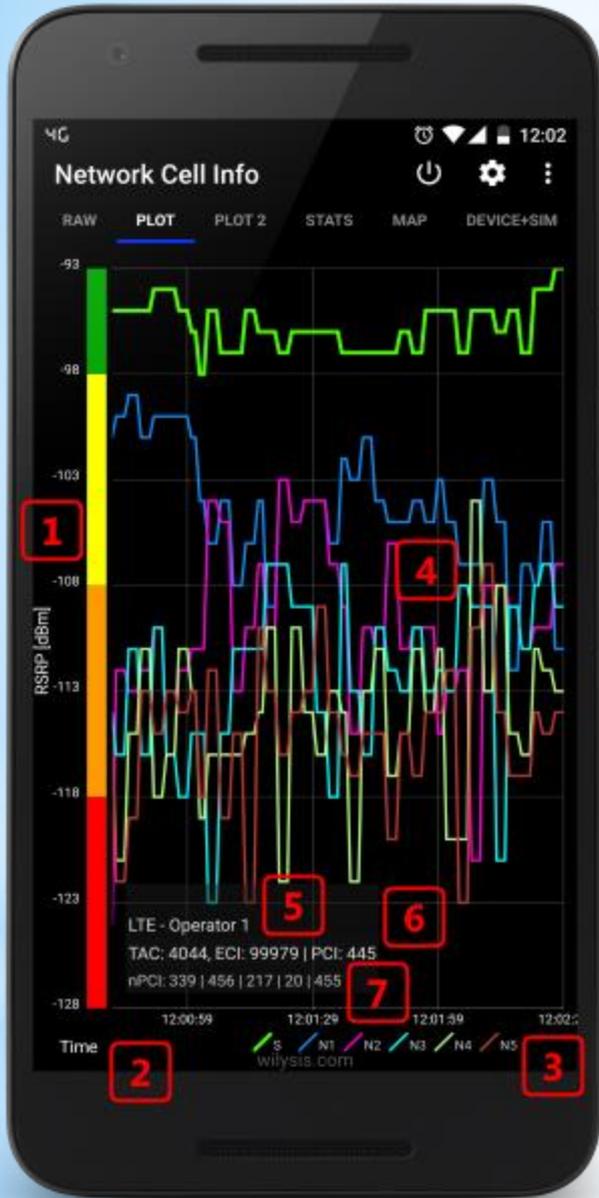
Raw tab, provides detailed info on the wireless connection.

- (1) “Data:” shows whether Mobile or WiFi data are used.
- (2) This Row shows the current connection info/status
[Hint: You can “click” on this row for a more abstract view]
- (3) This Row shows the serving cell connection status.
- (4) This and the subsequent rows show the neighbor cells status.

Note: If some field shows “-” or is empty, it means that Device/Android doesn’t provide that info.

Plot Tab

This tab shows the evolution of the signal strengths of serving and neighbor cells over time, allowing for better network quality exploration, especially when moving.



- (1) Y-axis : Signal strength in dBm
- (2) X-axis : Time
- (3) Plot legends (colors) for Serving (S) and Neighbor (N#) Cells
- (4) Signal Strength plots over time
- (5) Wireless network type, and Network provider name
- (6) Serving cell details
- (7) Neighbor cell details in order

Plot2 Tab

This tab is plotting signal strength/quality over time, and it is more tailored for the LTE wireless system.

- (1) Wireless network type, Serving cell details
- (2) LTE RSSNR over time
- (3) LTE RSRP over time
- (4) LTE RSRQ over time
- (5) Time, and Plot legends

Note: You can click on a point in the graph, and it will show the Y-axis value.



Stats Tab

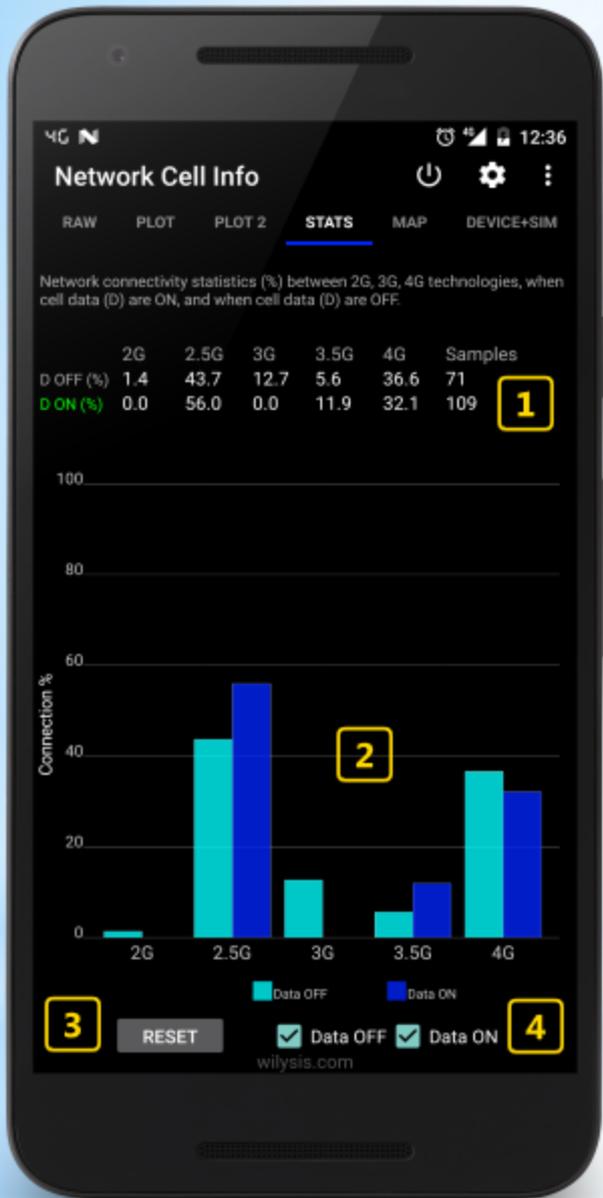
This tab gives essential information on the robustness and coverage of your network. For example you might have a 4G plan, but the network most of the time connects you to a 2G or 3G wireless network.

(1) Connection statistics on each of 2G, 2.5G, 3G, 3.5G or 4G technologies, when cellular data are ON or OFF, along with the counted number of samples.

(2) Bar graph

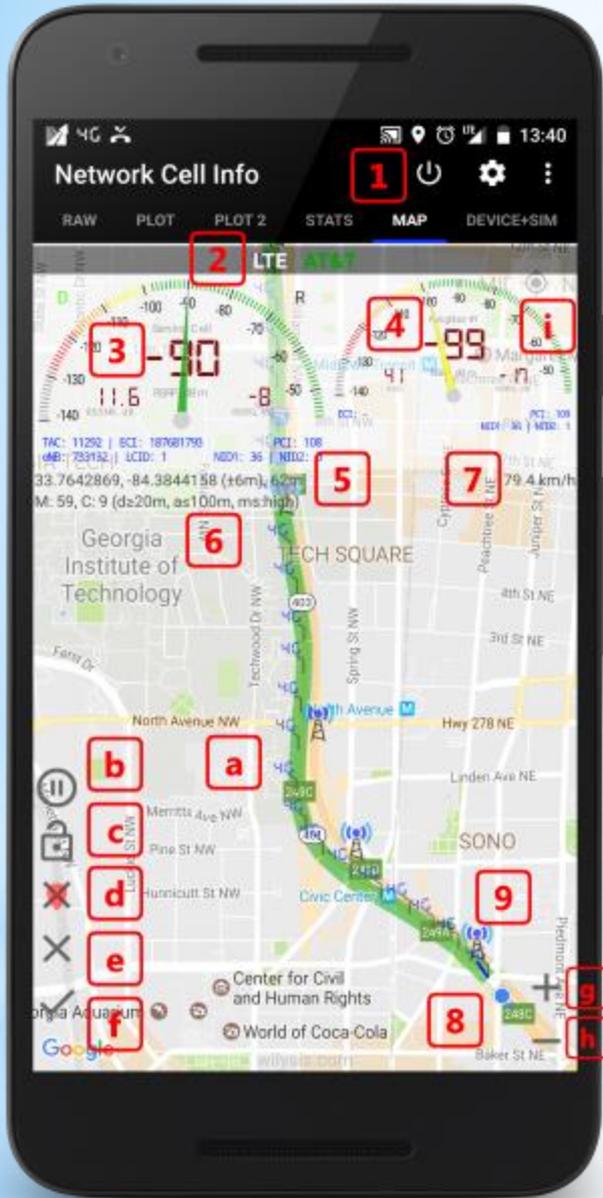
(3) Reset button to reset statistics counters

(4) Checkboxes to control the bar graph



Map Tab (1/2)

Tab where measurements are done, and visual location and cell info is provided.



- (1) App close, App settings, and overflow button for feedback etc.
- (2) Wireless network type, and Network provider name
- (3) Serving cell gauge along with cell info
- (4) Neighbor #1 cell gauge along with cell info
- (5) Current location Lat, Lon, with location accuracy in m/ft
- (6) Number of measurements and cell locations, with distance and accuracy settings
- (7) Speed in km/h or mph (from settings)
- (8) Current location
- (9) Serving **cell location not tower location** (marker has relevant info)

NOTE! We do not show tower locations, but indications of cell locations from Mozilla MLS database. We do not have tower database.

- (a) Measurements taken (markers have also relevant info, and the connecting line is according to signal level)
- (b) Start/pause updates
- (c) Lock (unlock) the cursor in the center
- (d) Clear measurement markers and lines
- (e) Clear map completely
- (f) Save log files (save the database to the device storage)
- (g) Zoom in
- (h) Zoom out
- (i) Move cursor in the center

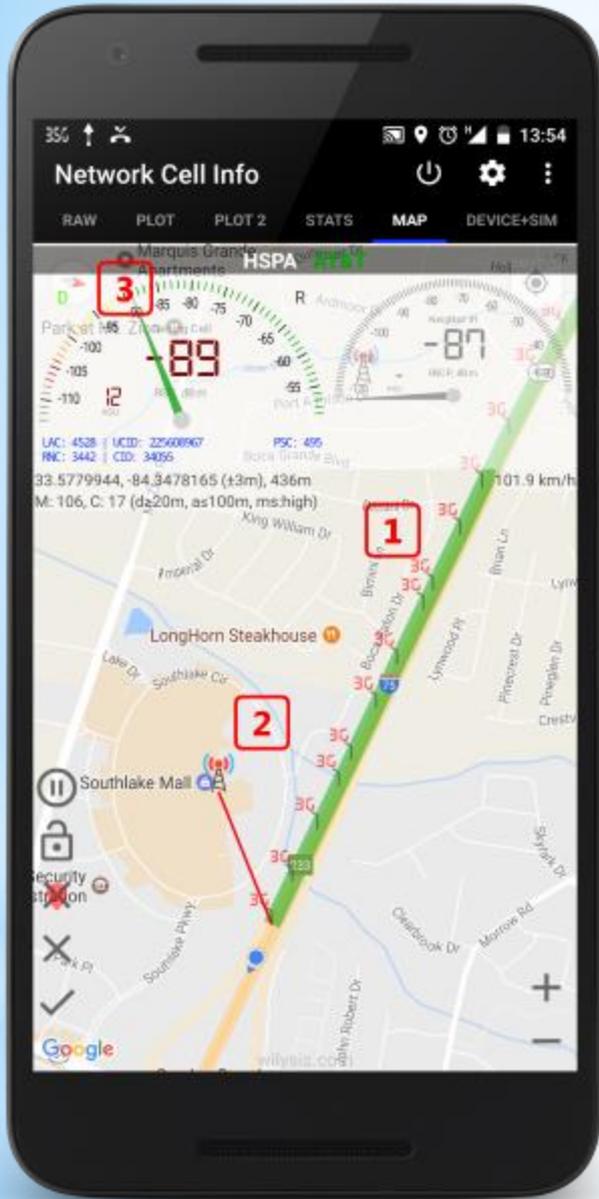
Map Tab (2/2)

Tab where measurements are done, and visual location and cell info is provided.

NOTE! We do not show tower locations, but indications of cell locations from Mozilla MLS database. We do not have tower database.

- (1) Measurements taken (markers have also relevant info - see it by clicking them, and the connecting line is according to signal level)
- (2) Serving cell location not tower location (marker has relevant info)
- (3) Compass (it appears when you “turn” the map with two fingers)

NOTE: Map is oriented towards North. Initially compass is not visible. You can change orientation by “turning” the map with the fingers, and the compass will then appear on the top left corner.

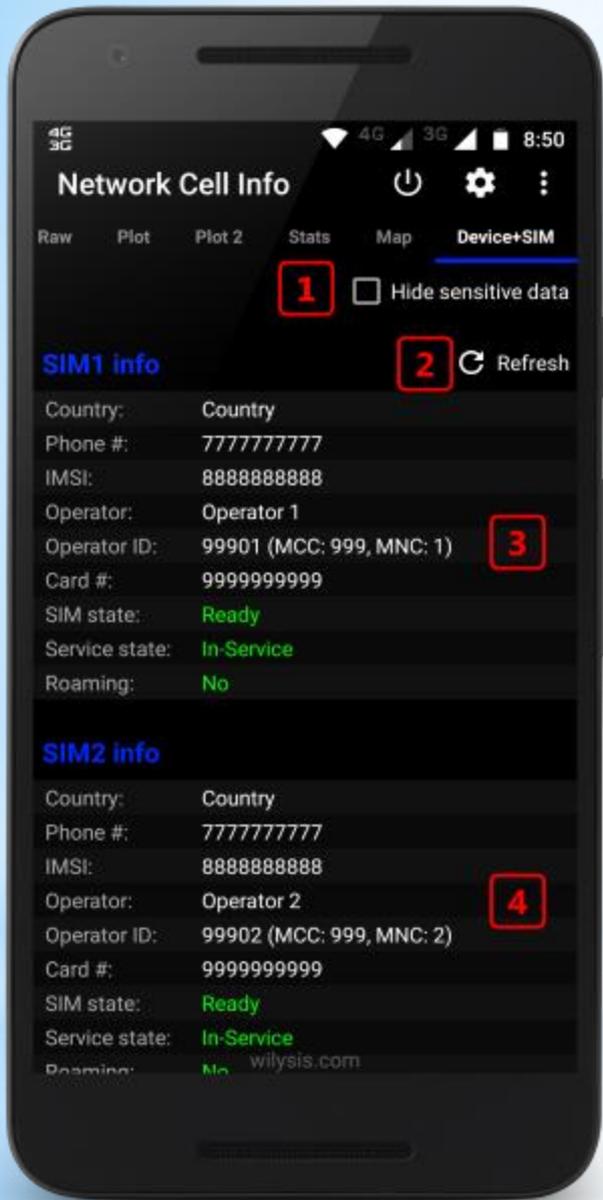


Device+SIM Tab (1/2)

This Tab provides information about the SIM(s) and the Device.

- (1) Hide sensitive data from displaying (in case you want to take a screenshot)
- (2) Refresh the data of the Tab
- (3) SIM1 information
- (4) SIM2 information (for dual SIM phones with Android > 5)

**** Dual SIM functionality is available in Android 5+ devices or in devices with Android 4.2+ having MediaTek processor. This is Android/Device limitation.**



Device+SIM Tab (2/2)

This Tab provides information about the SIM(s) and the Device.

(1) Device telephony related information

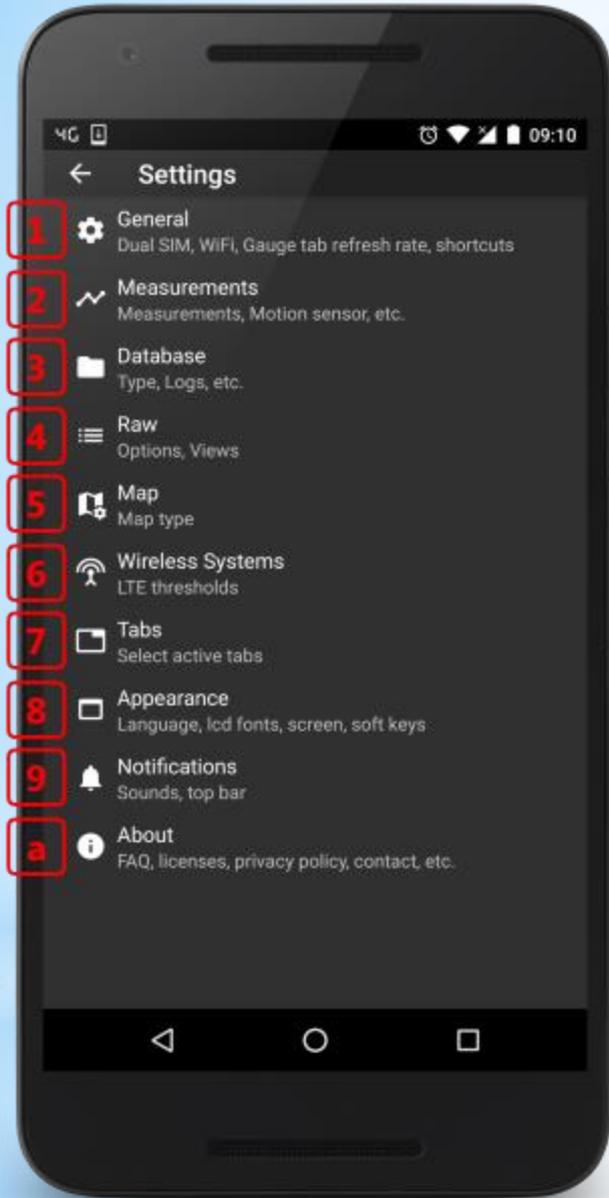
(2) **API17 cell functionality**: It should be **Yes** to have the full functionality of the app. Unfortunately, not all API17+ devices implement API17 telephony functions, but some implement only API11 functions! **For example, a device not implementing API17 telephony functions does not show neighbors nor PCI for the LTE. Also an Android 7 device not implementing API17 telephony functions does not show LTE band.**

(3) Device related information



Settings

In the Settings you can control the app functionalities, and also find useful information in the About section, such as FAQ, Privacy Policy (link), Disclaimer (link), Releases history (Log), etc..



(1) General settings: See later slide

(2) Measurements: See later slide

(3) Database: Select the database type when saving logs in the Map (see more info in the About / FAQ)

(4) Raw: Change the Raw Tab view (see also Raw Tab)

(5) Map: Select the Map type (normal, satellite, etc.)

(6) Wireless Systems: Set the LTE thresholds type (for signal level)

(7) Tabs: See later slide

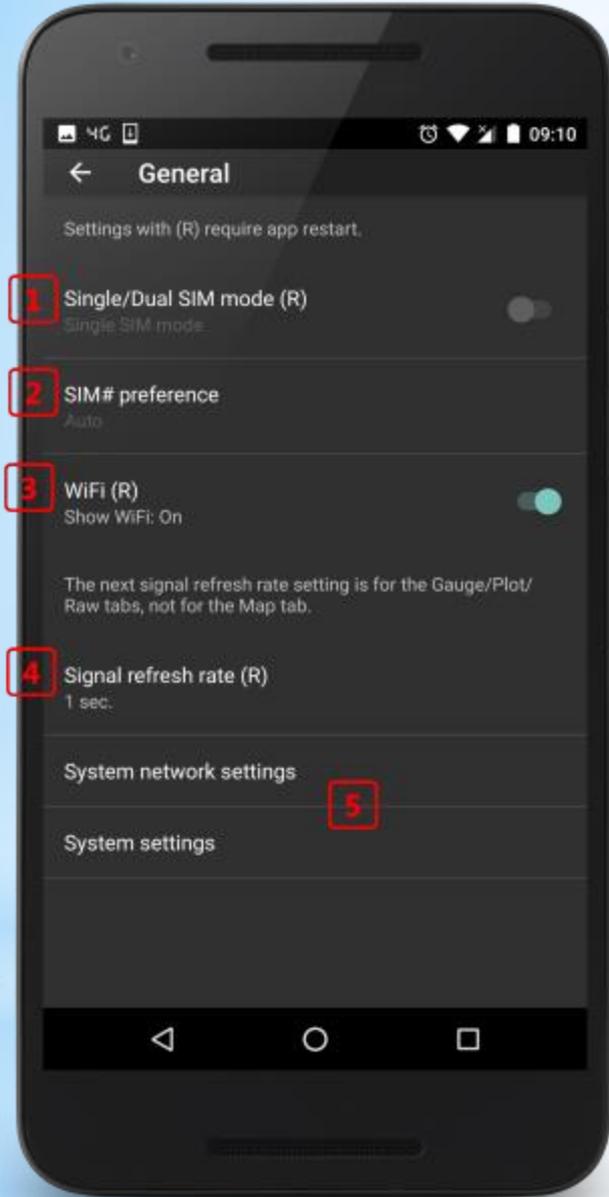
(8) Appearance: See later slide

(9) Notifications: See later slide

(a) About: See later slide

Settings - General

Note: Settings with (R) require restarting the application.



(1) Select single or dual SIM mode (for applicable devices)

(2) Select the preferred SIM number (for applicable devices) - this shows first that SIM in the Gauge/Raw tabs, and also it shows that SIM in the Plot/Stats tabs

(3) Select to display or not the WiFi signal gauges in the Gauge tab

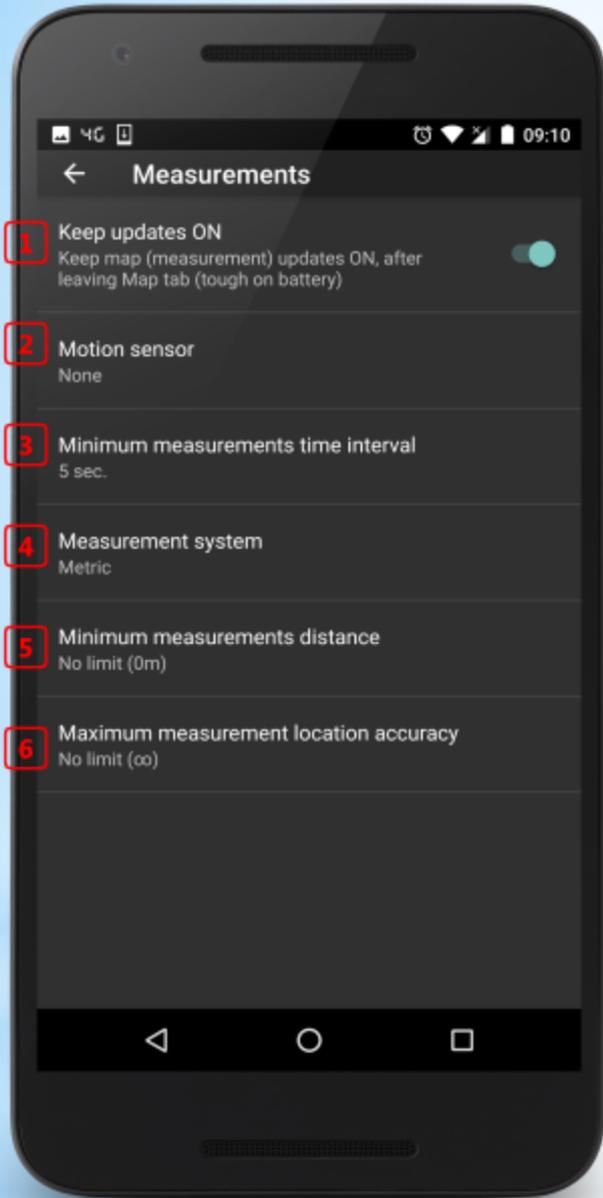
(4) You may set the signal refresh rate to a higher value if you want to save battery, but the signal strength refreshing will get obviously higher

(5) Shortcuts to the system settings and network settings

** Dual SIM functionality is available in Android 5+ devices or in devices with Android 4.2+ having MediaTek processor. This is Android/Device limitation.

Settings - Measurements

Measurements Settings are affecting the measurements taken in the Map tab.



(1) Switch to keep measurements updates (in the Map tab) ON even when leaving the Map tab

(2) Set the Motion sensor to reduce collecting measurements when there is no device motion

(3) Minimum measurements time interval between consecutive measurements

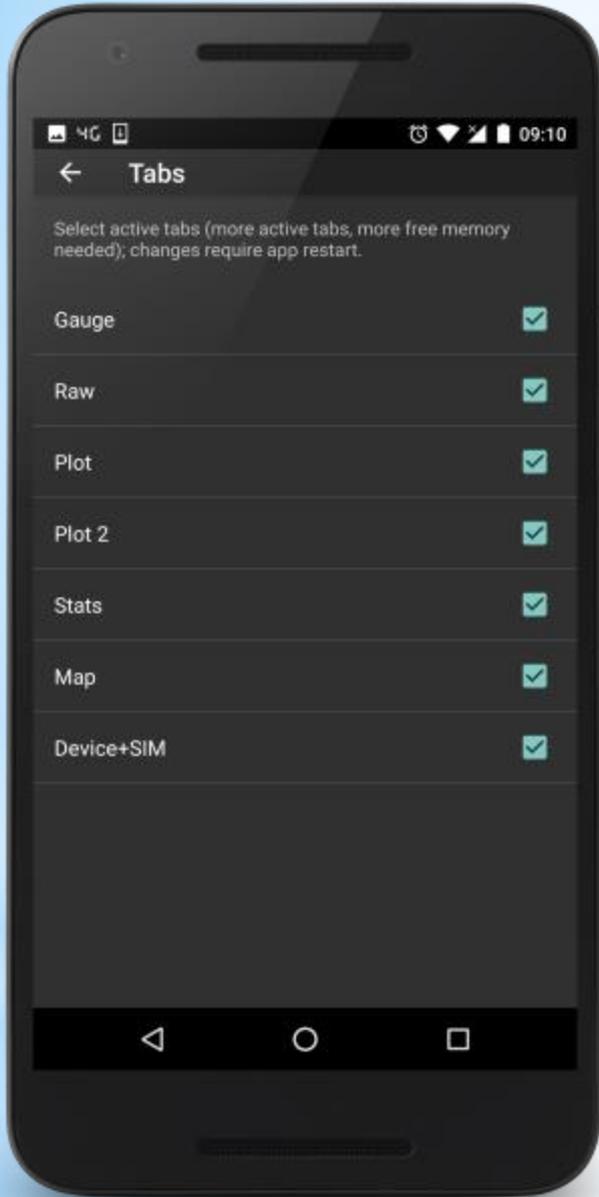
(4) Metric or US measurement system

(5) Minimum measurements location distance between consecutive measurements

(6) Maximum measurements location accuracy required to take a measurement

Settings - Tabs

In the Tabs Settings you can control which Tabs to be active (visible), and which to hide (saving time and resources).



Settings - Appearance

In the Appearance Settings, you can control:

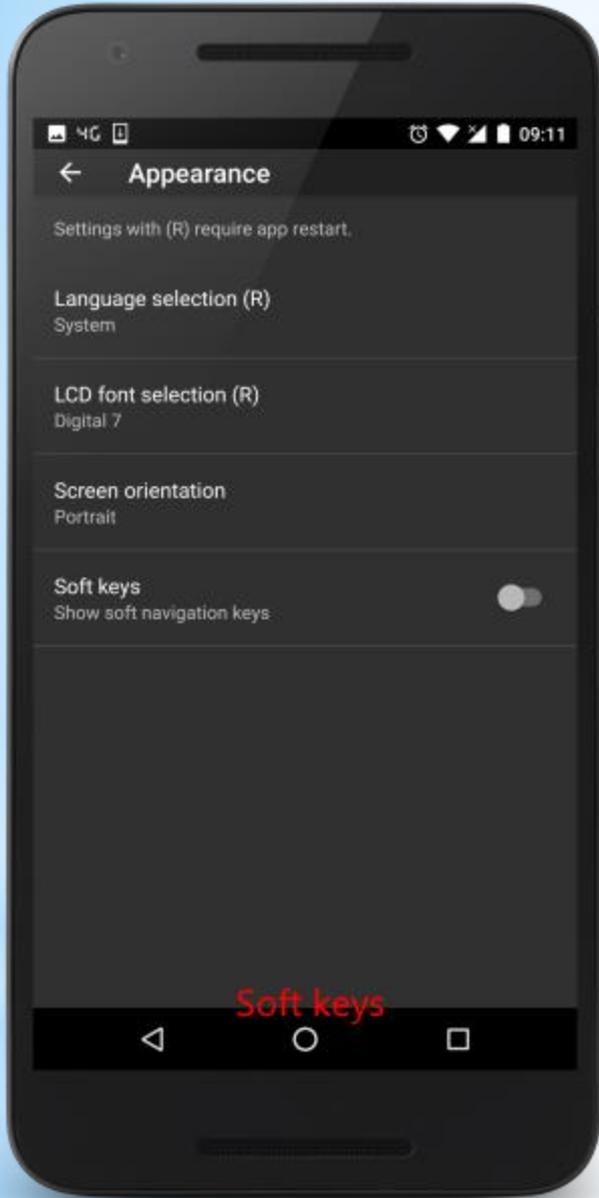
The language (for applicable Android versions)

The “LCD” fonts used in the Gauge Tab

The Screen Orientation (Portrait, Landscape, Auto)

And the Soft Keys appearance or not (for applicable devices)

NOTE: We do not recommend setting the Screen orientation to “Auto”, due to higher memory consumption.

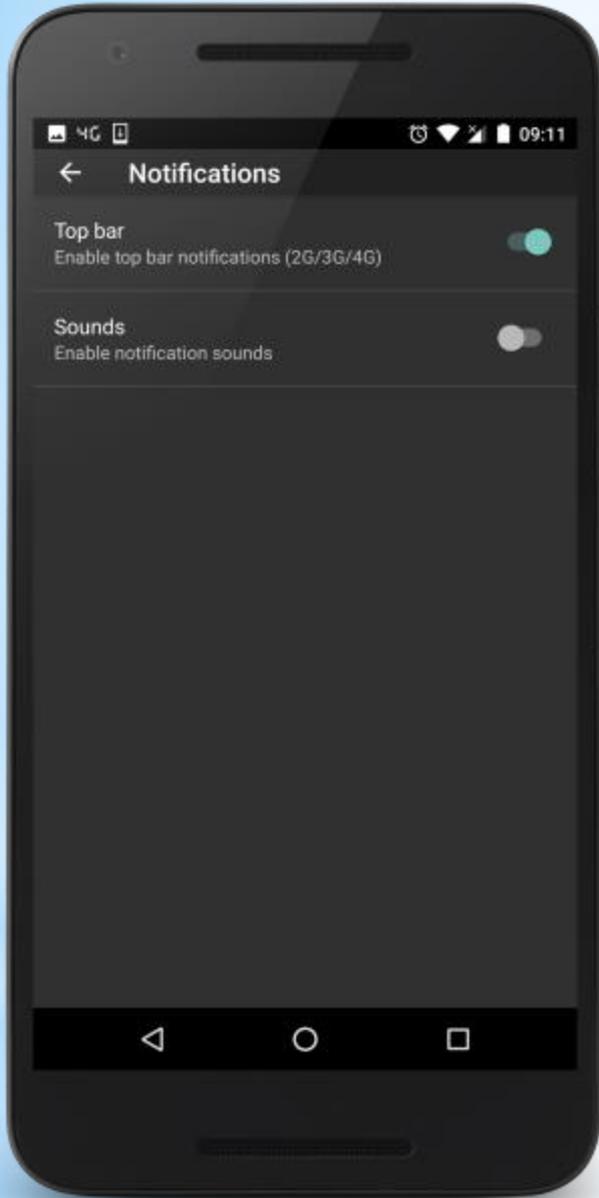


Settings - Notifications

In the Notification Settings, you can control:

Enable/Disable the Top bar notifications of the Wireless System Generation (2G, 2.5G, 3G, 3.5G, 4G)

Enable/Disable the Sound notifications: There is Sound notification when the Cell ID changes, and different sound notification when the Wireless System Type changes e.g. from UMTS to LTE



Settings - About

In the About screen, you can find:

FAQ (Frequently asked questions) section, including list of acronyms

Licenses list

Acknowledgments

Release history (change log)

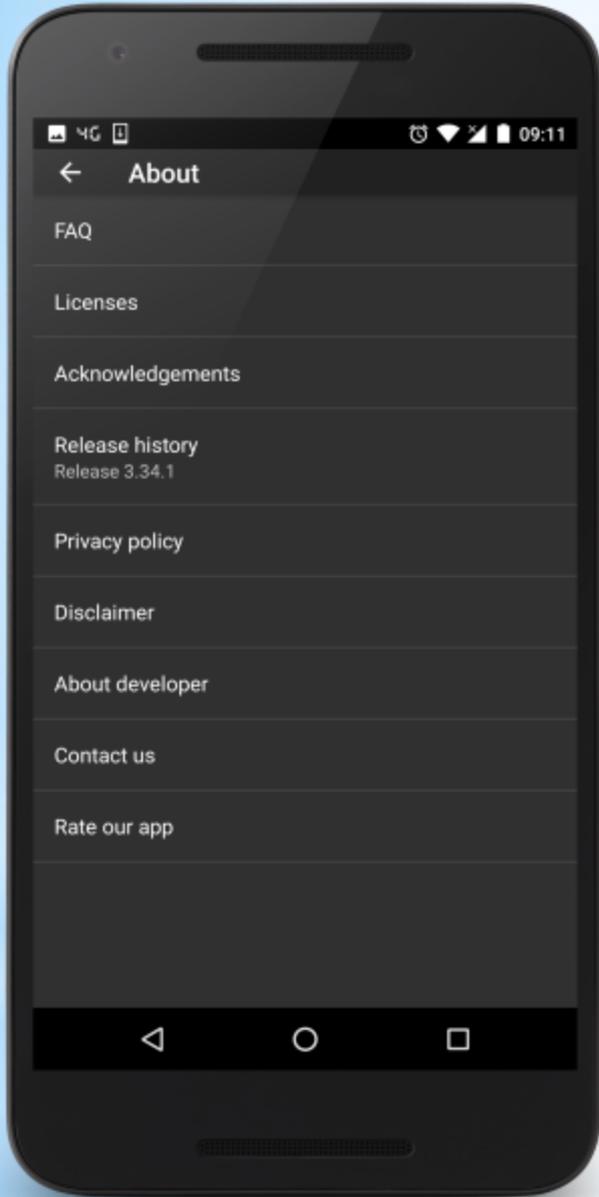
Privacy policy (external link)

Disclaimer (external link)

Info about the developer of the app

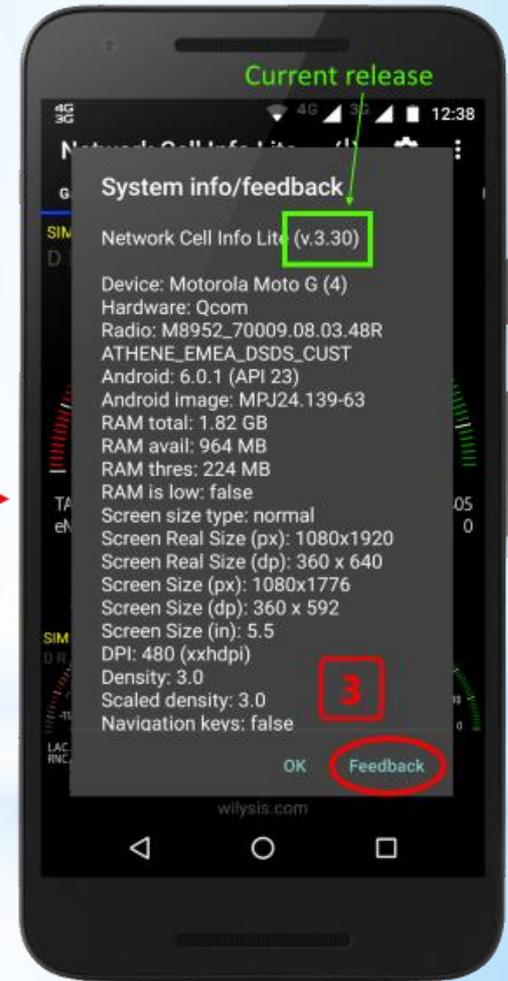
Our email to contact us, if you have any issues with the app

A link to give us a (5*) rating in the Store, which is very important for us to continue the project



System Info/Feedback

If you have any issues with the app, you may send us the system info/feedback to check and provide a fix if it is our issue, and not Android issue.



Thank you for using our applications!

We are constantly developing them to give you better experience.

If you are using (especially commercially) the Lite version, please purchase the full version to support our work.

Your comments are mostly welcome, and your **positive rating** in the Play Store is highly appreciated, and helping us to continue the work!

Support email: [apps /at wilysis /dot com](mailto:apps@wilysis.com)