QuecLocator for Easy Positioning

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QuecLocator - Quectel LBS

How can we get location information under these challenging signal environment ?

GNSS signal jamming
Very weak GNSS signal
In-door environment

The benefits from cellular location technology

Cellular location technology → Assisted positioning
Scalability of the design → Save space and cost

QuecLocator Technology

QuecLocator
Quectel's LBS technology based on Cellular location technology can fulfill your demands.
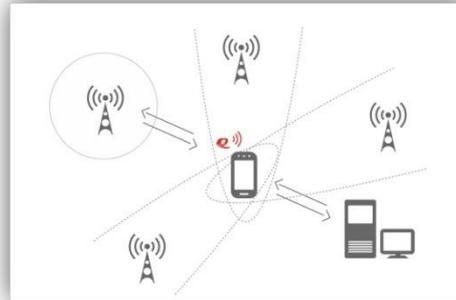
Cellular location technology

Based on cloud service server
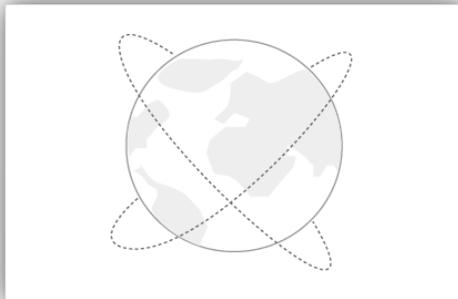
Get location everyday, everywhere

Easy to operate and use
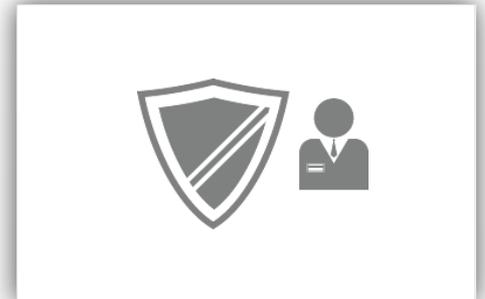
Protect customer's privacy

QuecLocator Technology
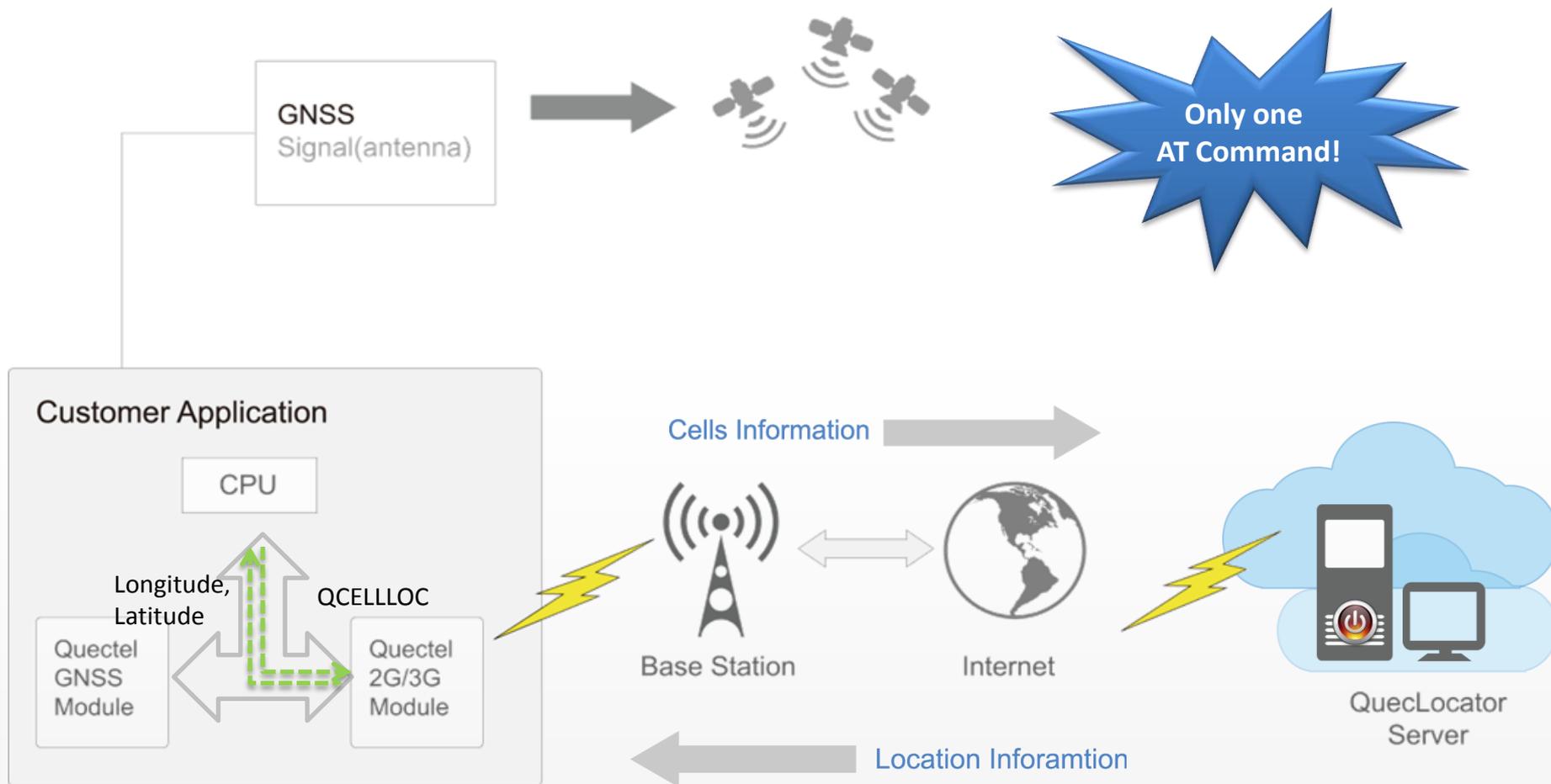
AT Commands

AT+QCELLLOC Get Current Location	
Test Command AT+QCELLLOC=?	**Response** +QCELLLOC: 1 OK
Write Command AT+QCELLLOC=<locMethod>	**Response** +QCELLLOC: <longitude>,<latitude> OK else response ERROR

<locMethod>: Location method.
  1 get current location by the cell's information.

<longitude> : The longitude of the location information. This value should be accurate to six digit after the decimal point, and the range is <-180.000000 to 180.000000>.

<latitude> : The latitude of the location information. This value should be accurate to six digit after the decimal point, and the range is <-90.000000 to 90.000000>.

Powerful database of QuecLocator

QUECTEL
Wireless Module Expert

Performance depends on the density of network cells.
The more data the module can acquire from the database of the server,
 the more accurate the location information will be.

238 Countries   **>13,000,000** GSM Base Stations   **>27,000,000** WCDMA Base Stations

Country	GSM	WCDMA
China	3,725,471	1,939,314
Russia	703,257	1,304,058
United Kingdom	324,602	1,549,879
Germany	416,931	1,175,544
USA	416,685	1,298,035
France	295,534	873,286
South Africa	84,134	219,138

238 Countries, totally more than 13 million GSM base stations and 27 million WCDMA base stations.

We have more than 5 million base stations in China.

Field test in China compared with GNSS

QUECTEL
Wireless Module Expert

Field Test Result

🔴 GPS signal records   🔵 GSM signal records

Area	GSM Vs GPS (average drift)
Suzhou to Shanghai	387m
Changzhou	345m
Hefei	392m

Hefei

Suzhou-Shanghai

Changzhou
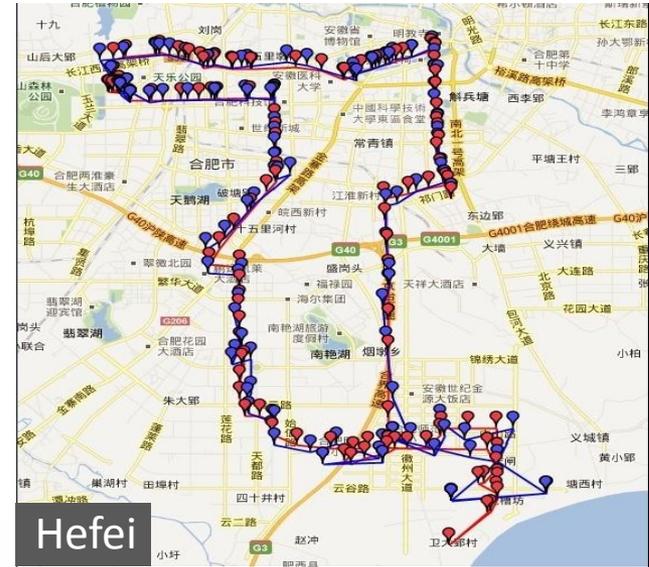
Network coverage map 1
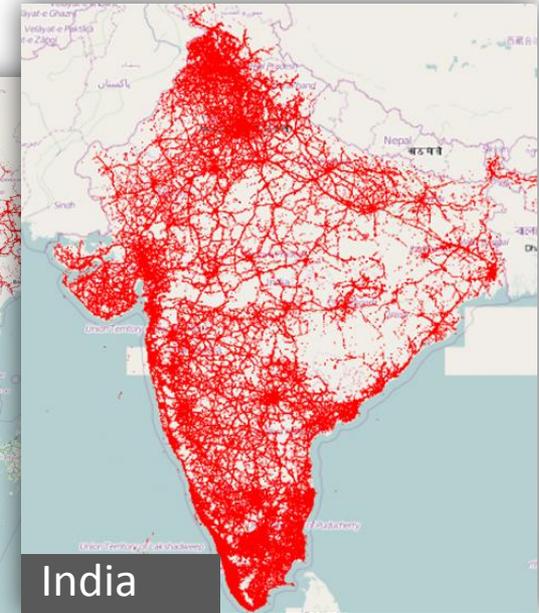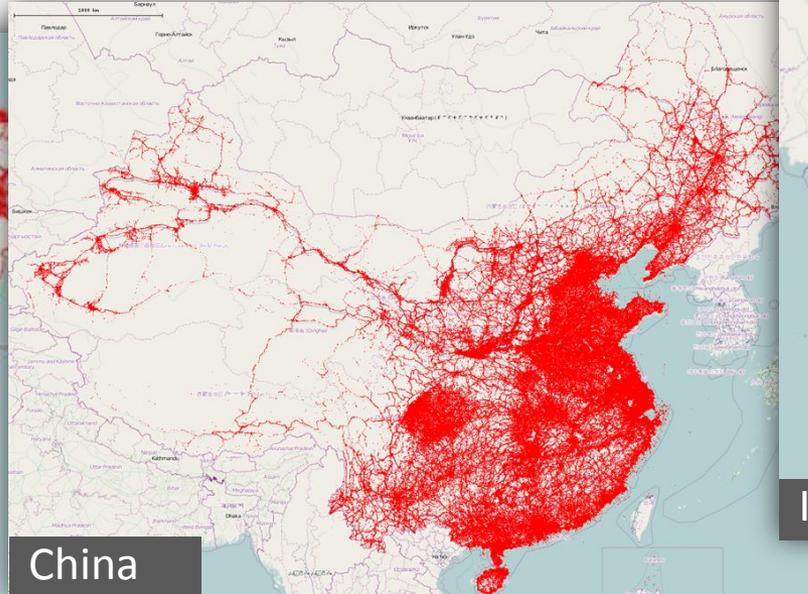
Taiwan

China

India

Country	GSM	WCDMA
China	3,725,471	1,939,314
Taiwan	100,008	727,509
India	998,078	442,248

Network coverage map 2

Country	GSM	WCDMA
Germany	416,931	1,175,544
France	295,534	873,286
Italy	163,919	613,951

Germany

France

Italy

Network coverage map 3

Poland
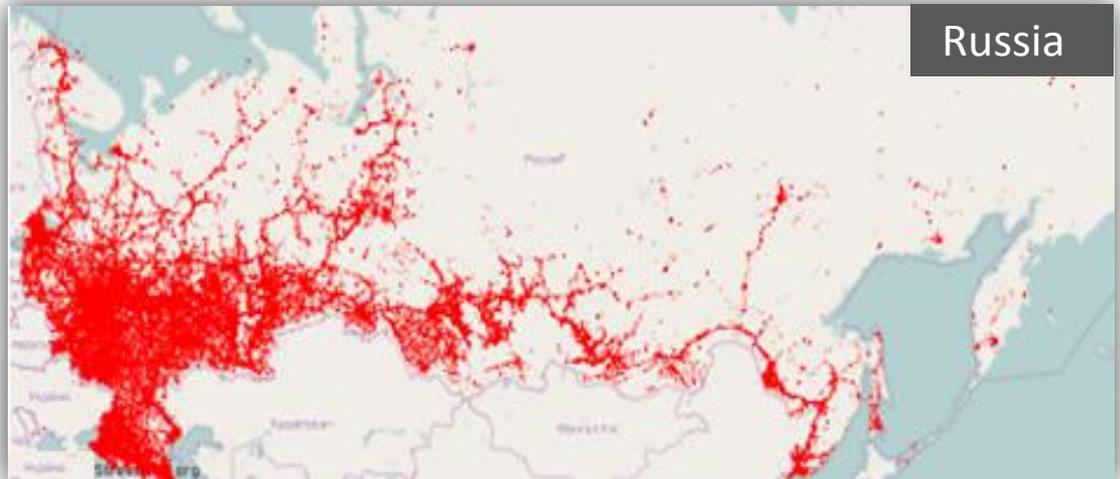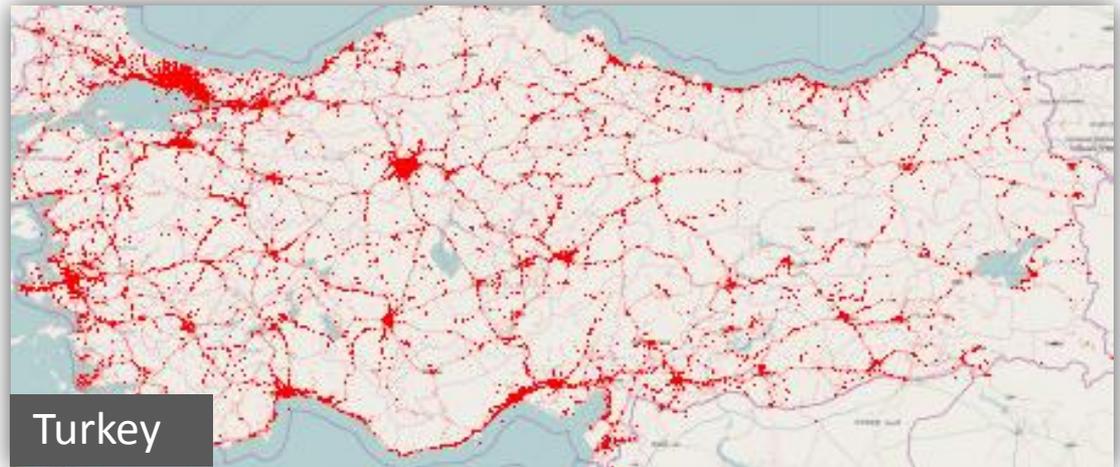
Turkey

Russia

Country	GSM	WCDMA
Poland	215,765	583,408
Russia	703,257	1,304,058
Turkey	198,879	340,693

Network coverage map 4

Brazil
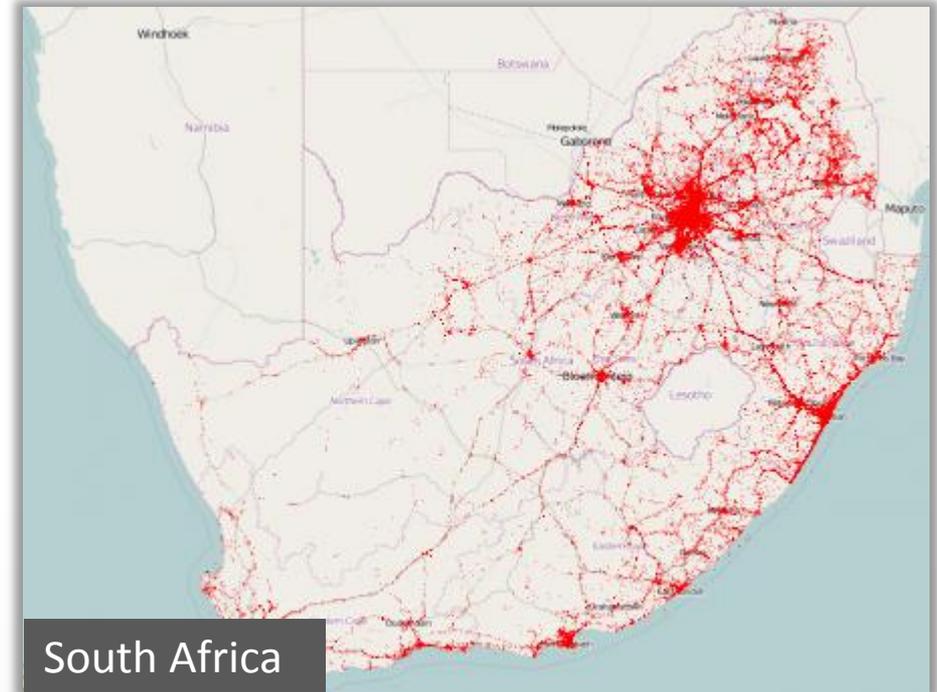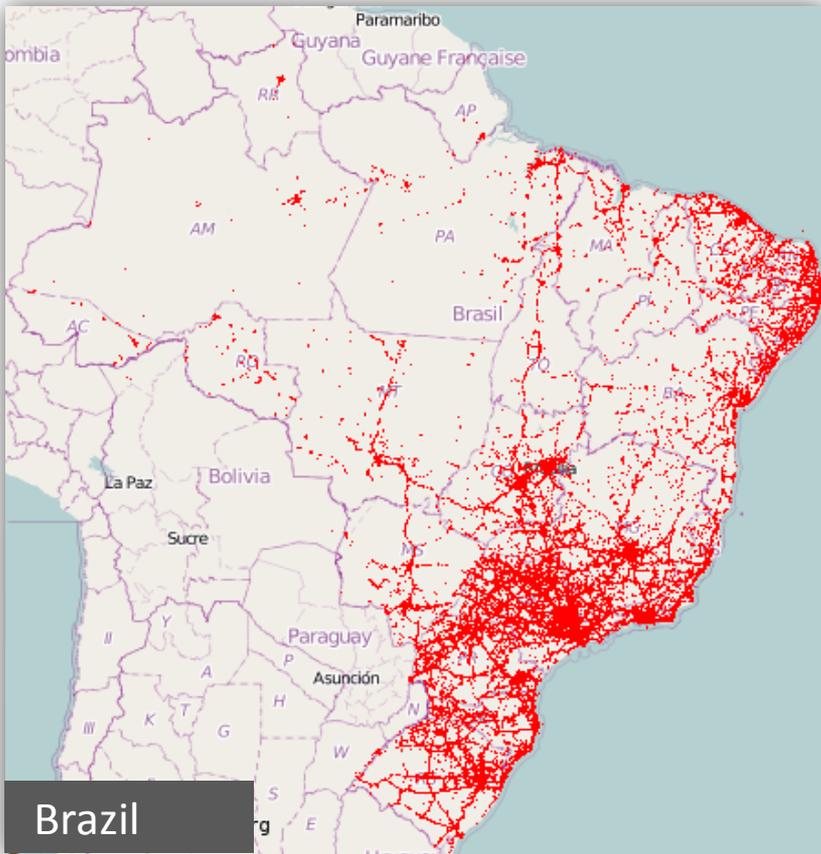
South Africa

Country	GSM	WCDMA
South Africa	84,134	219,138
Brazil	275,521	351,162