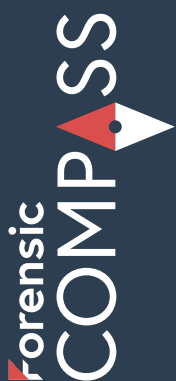




Technical Specification

Portable handheld Radio Frequency survey tool with on-board GPS. FC Cellular records cellular and Wi-Fi networks providing service at a location of interest which can be compared against Call Data Records. FC Cellular is easy to use and offers convenient outdoor and indoor survey modes. Surveys are recorded and stored in a forensically-sound manner and are easily extracted by the user.



Device

Samsung Galaxy Note 4
Samsung Galaxy S8

Cellular Bands

2G (GSM)

Bands Available (MHz): 850, 900, 1800, 1900

3G (WCDMA)

Bands Available (MHz): 850, 900, 1900, 2100

4G (LTE)

Bands Available (MHz): LTE band 1(2100), 2(1900), 3(1800), 4(1700/2100), 5(850), 7(2600), 8(900), 12(700), 13(700), 17(700), 18(800), 19(800), 20(800), 25(1900), 26(850), 28(700), 32(1500), 66(1700/2100), 38(2600), 39(1900), 40(2300), 41(2500)

Wi-Fi Bands

Supports: 802.11 a/b/g/n/ac Wi-Fi networks

Bands Available: 2.4 GHz and 5 GHz

Facilities

Monitor Mode allows scanning to ensure network service is available prior to logging

Continuous Survey Mode enables a convenient start/stop approach to log survey data

Multi-Point Survey Mode allows the user to simply tag the survey data to correlate with defined survey points during an indoor survey

Configuring alarms on Cell ID, BSSID and SSID quickly alerts the user to the presence of a target network identifier

Automatic File Hashing helps ensure the integrity of all logged data

Backup and restore feature to ensure survey data is not lost

Technology, Band and Channel Lock* enable the user to focus on service from a specific cell ID of interest

Data Recorded

Date

Time

Location (GPS with number of satellites or multipoint tag)

Mode

Network Operator

Network Type (Technology)

2G Data: Serving Cell ID, Serving LAC, Serving RSSI, Neighbour Cell ID, Neighbour LAC, Neighbour RSSI

3G Data: Serving Cell ID, Serving LAC, Serving PSC, Serving RSCP, Neighbour PSC

4G Data: ECI, eNode-B ID, Sector ID, PCI, TAC, RSRP, RSRQ, Neighbour PCI, Neighbour RSRP, Neighbour RSRQ

Wi-Fi Data: BSSID, SSID, Channel, RSSI, Security

Survey Mode

Idle (Data and SMS mode available in LTE only)

Output Data

Data is conveniently organised into categorised folders and stored as standard csv files ready for analysis and mapping

* Capability available on FC Cellular (Samsung Note 4) only. Other differences may exist between FC Cellular handset variants.