



CellScout

Mobile Network Surveyor



APAC DISTRIBUTOR

TTS TELECOMTEST
SOLUTIONS

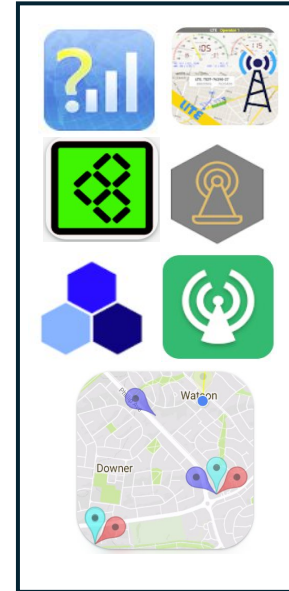
- Handheld Network Surveyor for Mobile networks
- 4 Antenna ports for network surveys with MIMO
- Passive Testing: Visualisation of RSSI, RSRP, RSRQ and SINR in Gauge, Timeline, Bar and Map views
- Active Testing: Speedtest
- Outdoor Maps and Indoor Floorplans Surveys
- Band, Cell and Technology **Forcing** including SA/NSA
- Ultimate tool for checking 5G **Slicing** (ex: NCGI info)



Game Changer

CellScout vs Handset-Based Testing

- Plugin preferred external antennas (Omni or Directional)
- Technology and field oriented GUI
- No rooting required for band/cell forcing
- Logging
- VNC remote control
- Import database of towers and cells
- Fraction of the price of handset-based drive test tools



Google Play



Game Changer



enhancell

infovista



ROHDE & SCHWARZ



KEYSIGHT

ACCuver

SwissQual

TTS

TELECOMTEST
SOLUTIONS

Hardware Overview

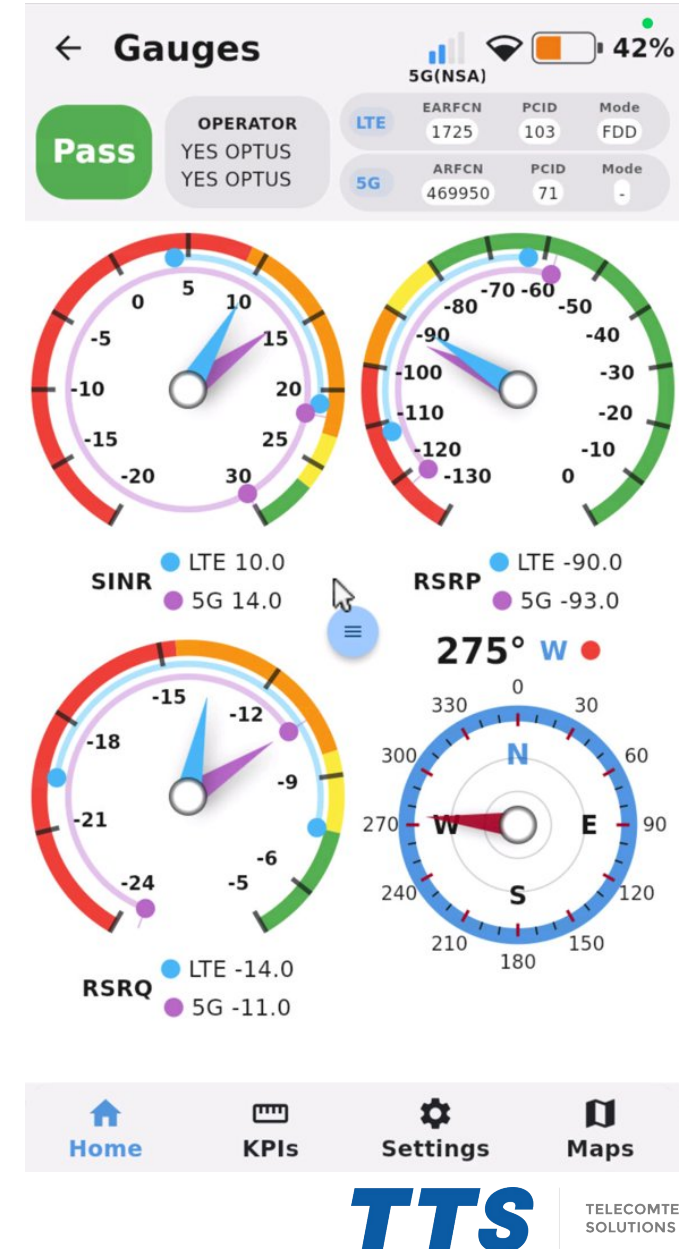
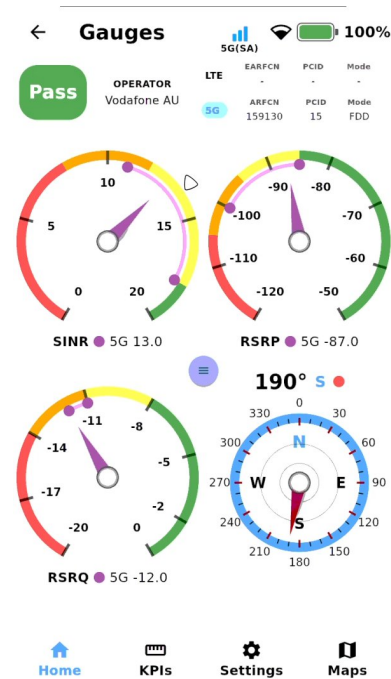
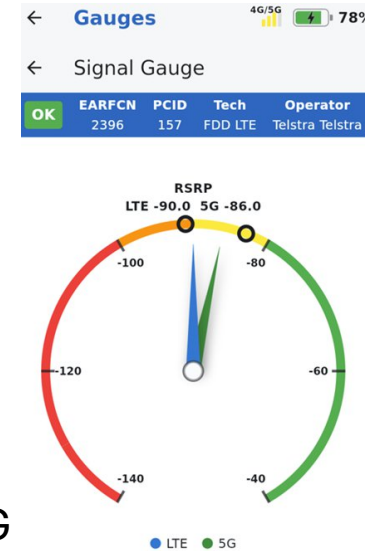
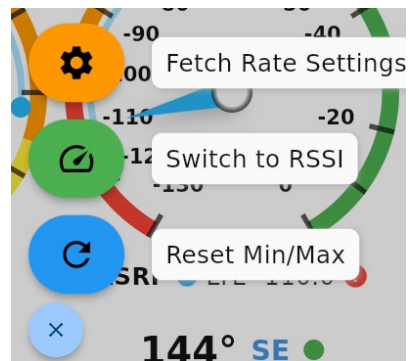
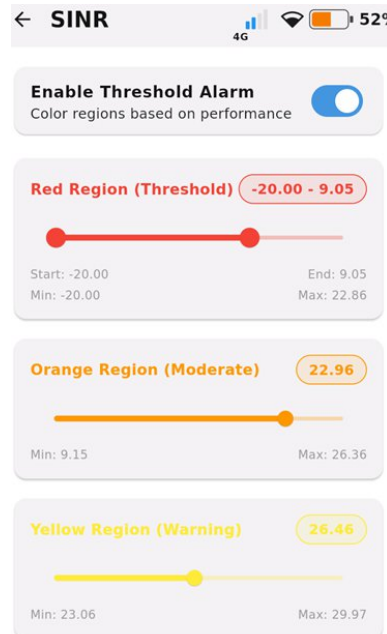
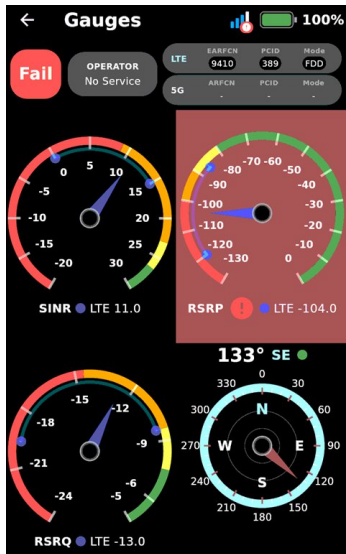
- SIM and SIM-less scanning
- 4x SMA Antenna Ports with MIMO Support
- Dedicated port for GNSS
- Built-in compass
- Built-in WiFi for remote control and file management
- Built-in battery with 5+ hrs of continuous operation
- 5" Touchscreen Display with brightness control
- Light weight of only 1Kg
- IP65 Housing = *Splashproof*



CellScout

Gauge View

- PASS/FAIL indicator for failing parameters
- User-defined thresholds for each parameter (Red/Orange/Yellow/Green) with beeper
- Expandable view for parameters when clicked
- Simultaneous display of 4G and 5G values + cell info
- Adjustable refresh and log rate starting from 1 second
- Compass for real-time detection of signal variation vs bearing
- Toggle between compass and 4G RSSI gauges
- Fluctuation range (Min/Max) for each parameter on both 4G and 5G
- Dark view mode



More Views

- **Charts View:**

Histogram for each parameter in 4G and 5G
User-defined thresholds for each parameter
Full screen view for parameters when clicked

- **Candidate Cells View**

Signal quality parameters from neighbouring cells
(Green PCID = Connected Cell)

- **Signal Per Port View**

Breakdown of signal level from each antenna

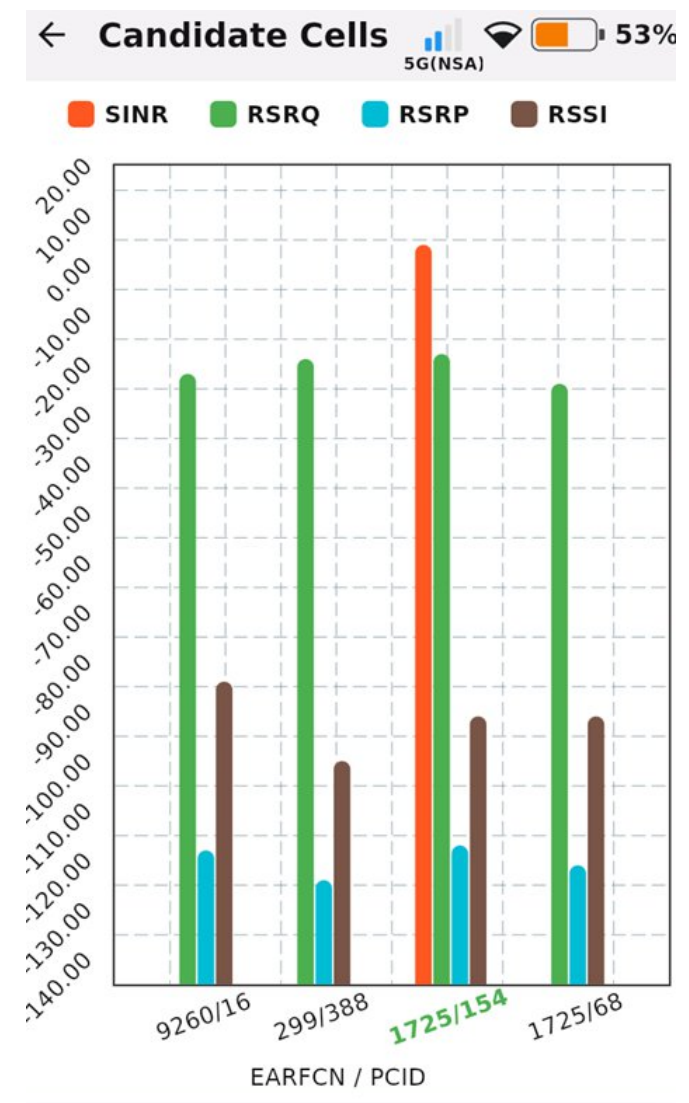
MIMO Status (No MIMO, 2x2, 4x4)

Detect beam-related issues

← **Signal Per Port** 5G(NSA) 54%

5G Connection
2x2 MIMO Active

Antenna	SINR	RSRP	RSRQ
Overall	9.0	-114.0	-19.0
Antenna 1	-6	-115	-12
Antenna 2	--	--	-3
Antenna 3	--	--	-3
Antenna 4	-20	-114	-13



Cell Info and Locking

- Cell Info:**

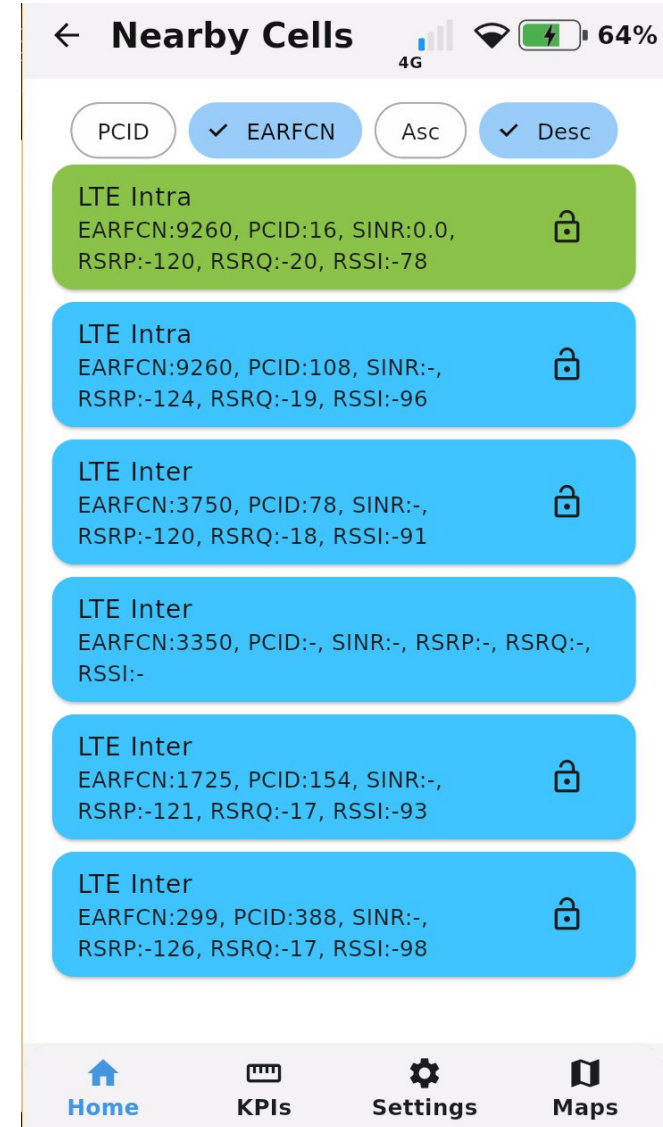
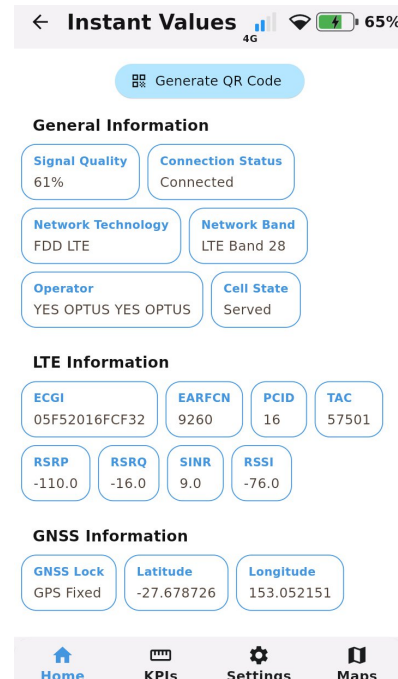
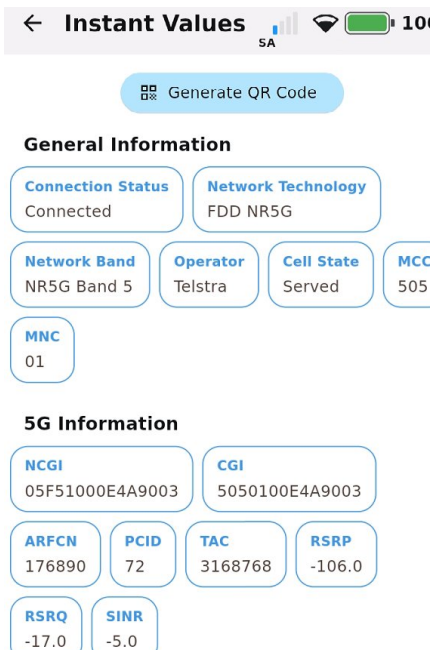
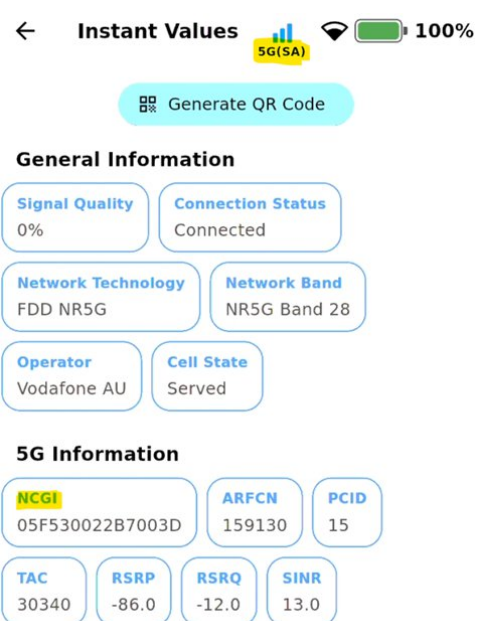
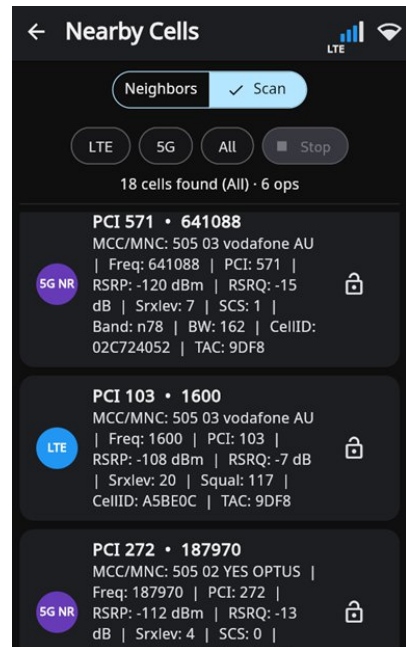
Provides essential cell information and connection mode
NCGI value for 5G SA (essential for **5G Slicing**)

Generate QR code for all info, easy to scan and share

- Locking to Nearby Cells**

List nearby detectable cells info and their signal quality

User can select a cell to lock to



Network Modes, Bands and Forcing

- Modes and Bands:**

Based on the Quectel Module RM520N-GL

LTE FDD Bands: B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71

LTE TDD Bands: B34/38/39/40/41/42/43/48; LAA: B46;

NR SA/NSA Bands: n1/2/3/5/7/8/12/13/14/18/20/25/26/28/29/30/38/40/41/48/66/70/71/75/76/**77/78/79**;

WCDMA Bands: B1/2/4/5/8/19

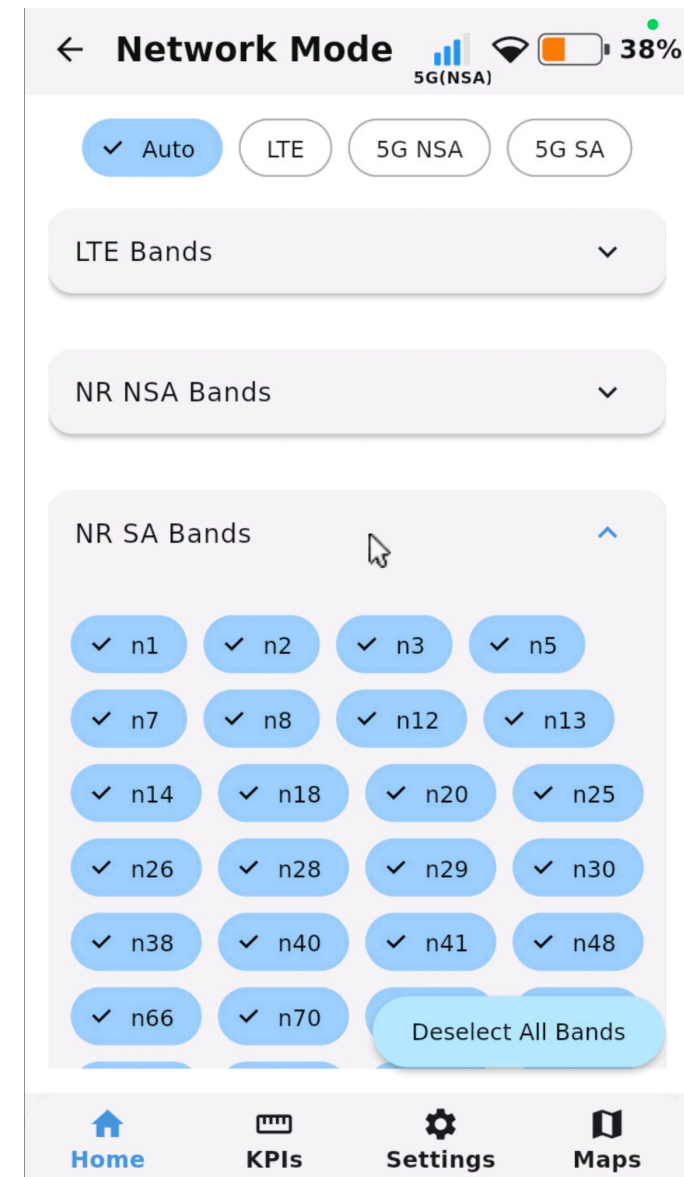
Chipset Certifications:

T-Mobile/Verizon/AT&T/NTT DOCOMO/Deutsche Telekom/Telefónica/Telstra/KT/GCF/PTCRB/CE/
Anatel/CCC/RCM/IC/FCC/JATE/TELEC/KC/NCC/SRRC

- Band Forcing**

Flexibility in selection of band(s) and mode(s) to use for testing

Single band can be selected for forcing, ex: (n78 SA) or (n7 NSA + B7 LTE)



Logging, Reporting and Remote Access

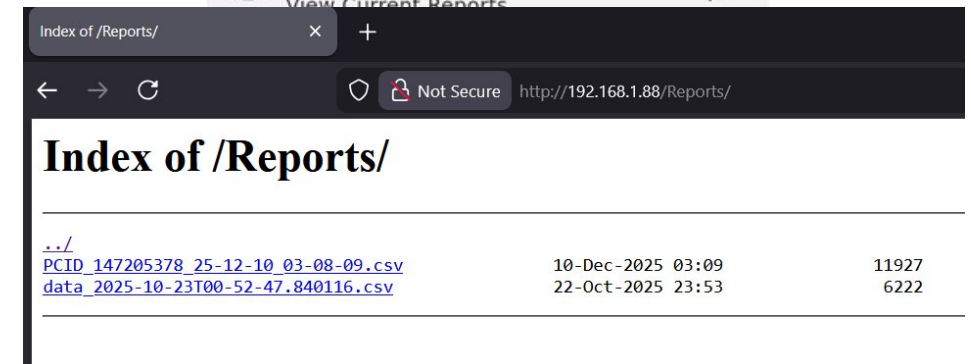
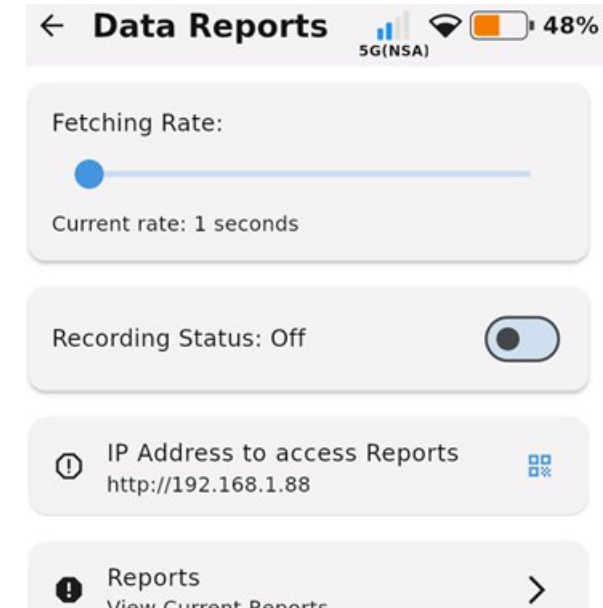
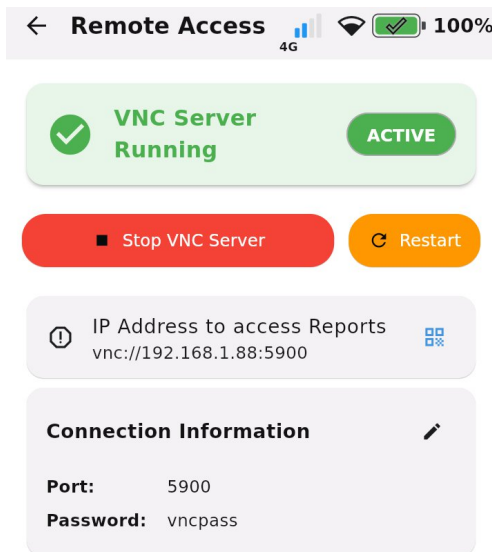
- **Logging:**

All displayed parameters can be recorded into a CSV file with a user selectable logging rate as fast as 1 second

Results are downloadable via WiFi using a browser with the unit IP Address

- **Remote Access:**

Built-in VNC server, started on-demand, for remote access and GUI mirroring
Compatible with all VNC client apps (Windows, Android, iOS)

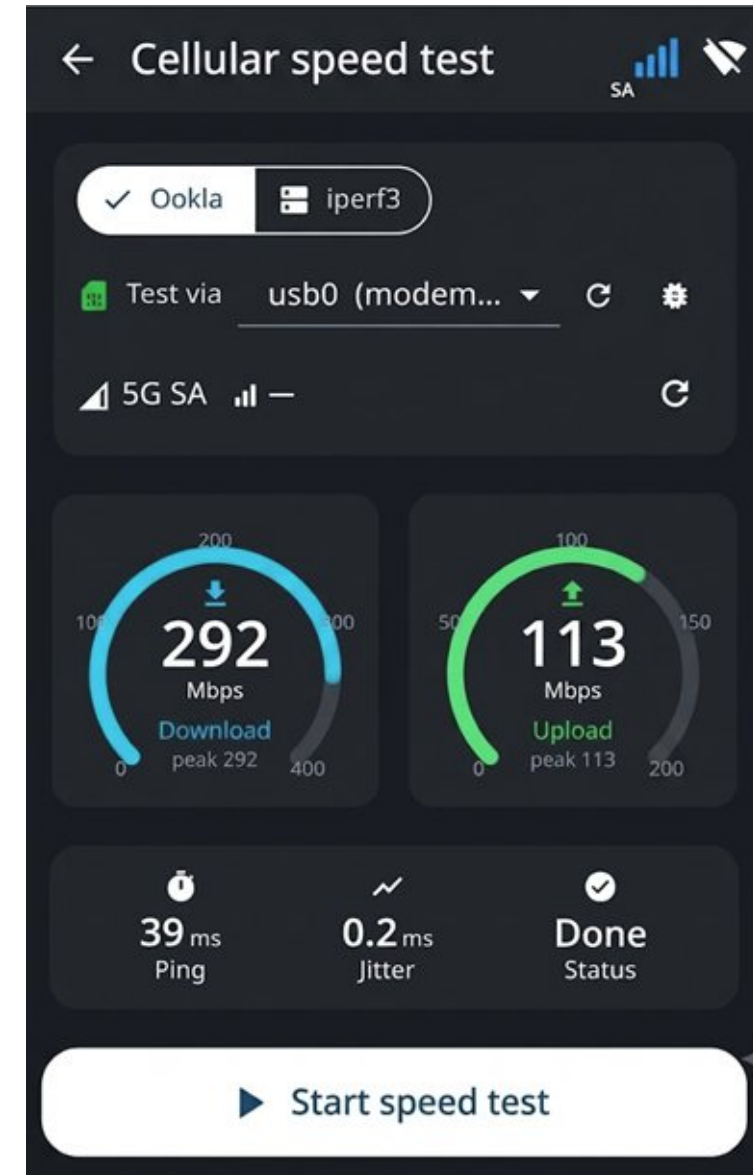


Speedtest (Option)

- **Ookla Speedtest**
- **iperf3 Speedtest (TCP)** with user-defined list of servers

Perpetual License#1: Up to 300 Mbps

Perpetual License#2: Up to 2.4 Gbps DL / 900 UL



Floorplan (Option)

- Multisession survey (pause/resume)
- Multi-floor per project
- Delete incorrect points
- RF metrics per point with color bins
- Speedtest on-demand
- Images (PNG, JPG, PDF, WebP, GIF, BMP, or SVG)
- Image scale
- Zoom-in/out
- Walkpoints total counter
- Export as CSV for post processing tools



5G SA Slicing Gadget (Option)

-  | List of Allowed S-NSSAIs received from network
-  | List of S-NSSAIs in the default configured NSSAI stored on CellScout
-  | List of Rejected NSSAIs for 3GPP and non-3GPP access
-  | List of Configured NSSAIs on CellScout
-  | Force write specific NSSAIs on CellScout

Maps and Towers

Map View

Interactive map view with:

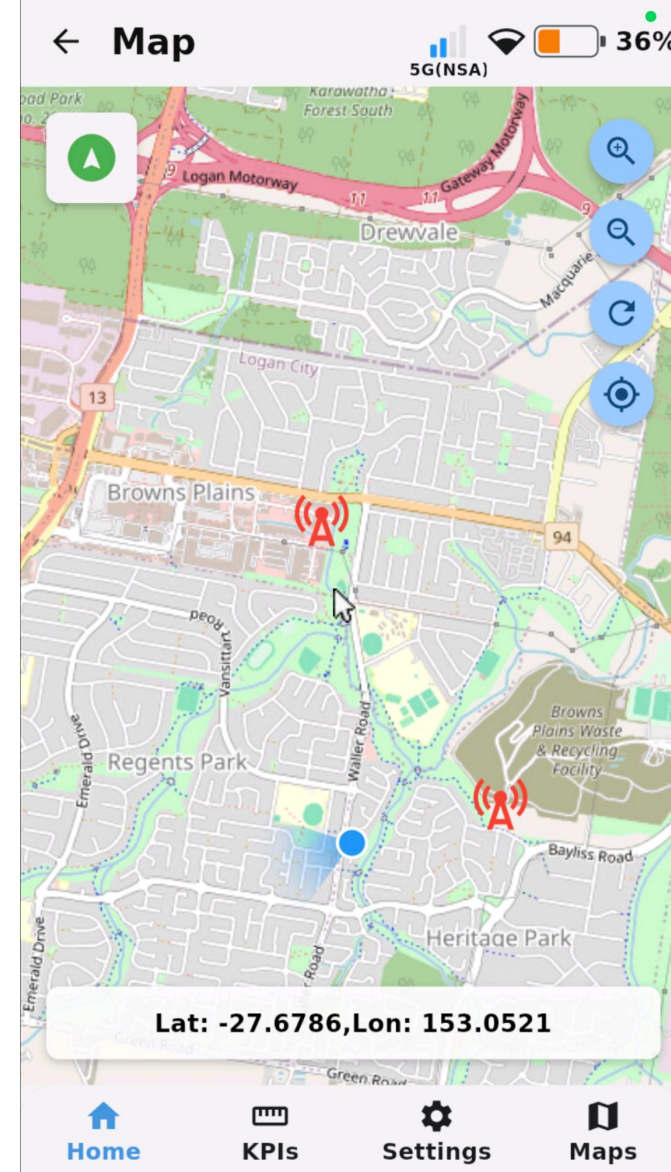
- Zoom-in/out
- User coordinates and orientation
- Distance to selected tower(s)
- Clickable tower icons to display PCIs, ZIP Code, and Coordinates

Tower List View

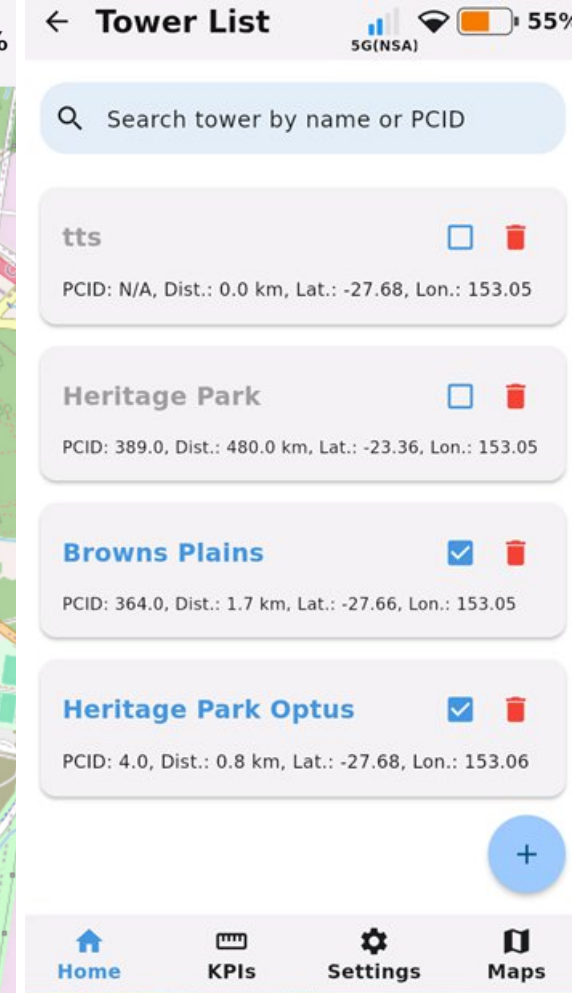
Import of towers database

Manual addition of towers

Select which towers to display on map with quick search and filter by name/ZIP code/Operator



CellScout



Import/Export (over WiFi)

- Import floorplan images (PNG, JPG, PDF, WebP, GIF, BMP, or SVG)
- Import CSV Tower Lists
- Import profiles of RF metrics bins (Red/Orange/Yellow/Green) (CSV)
- Export Logs of RF Metrics and Speedtest logs (CSV)

Free Companion SW Tools

5G Back-Hauling of Camera Surveillance on High Poles
Calculator for SINR/RSRx bins to achieve target UL speeds

Scenario controls

Primary parameters

5G SA band FR1 - sets duplex/SCS/power

n77 · 3.3-4.2 GHz · HPUE

Channel bandwidth valid for the band's SCS

30 MHz (78 PRB)

Target upload / camera application Mbps

5

Cameras on the cell share the uplink

1

Streaming at once % of cameras active

100

Max UL modulation network cap

256QAM (module max)

UL MIMO rank 2x2 on n38/41/48/77/78/79

1 (single layer)

Cell resources for cameras % of PRB free

100

Camera height m above ground (on pole)

20

Surveying Antenna Gain dBi

10

Camera Antenna Gain dBi (on the pole)

10

UE Tx power auto from band; override

26 dBm (HPUE)

SINR limiting regime governs gain-SINR transfer

Interference-limited

Ground-pole survey margin dB, residual uncertainty

3

App-PHY overhead HARQ + IP, %

20

Fading margin dB, camera confidence

2

4 · Supporting metrics — RSRP, RSRQ, RSSI

These don't set throughput; they confirm the SINR figure can be trusted. Gate lines show the **camera** requirement and the **ground-survey** line (shifted for antenna-gain difference, height and UE power). RSRQ is antenna-invariant — it cancels.

Metric & role	Yellow/Green	Orange/Yellow	Red/Orange
SINR — throughput driver (site-specific; Table 1)	Use the Ground-survey values in Table 1 (varies by site).		
RSRP — coverage / UL power camera / ground line	-90.0 / -96.6	-100.0 / -106.6	-108.0 / -114.6 dBm
RSRQ — load / interference (gain-invariant)	-10.0	-13.0	-16.0 dB
RSSI — consistency (ground, derived)	-67.7	-74.7	-79.7 dBm

Columns to include in CSV:

☒ SINR bins

☒ RSRP bins

☒ RSRQ bins

☒ RSSI bins

☒ Scenario inputs

Incl.	Site	Cell	Band	Airtime	Target	Cams	SINR R/O-O/Y-Y/G	Feasible
-------	------	------	------	---------	--------	------	------------------	----------

No sites added yet. Set your scenario, enter a Site/Cell ID, pick the airtime, and click "Add current scenario".

Download CSV

Clear all

CellScout

RF Probe

24/7 Signal Stability

Availability

Outages counts/duration

RAT Changes (LTE ↔ NR)

Cell/Band Re-selection Statistics

Thresholds Pass/Fail

Variability Statistics & Graphs

1. Continuity of Signal

99.99%
Availability
(connected & served)

4
Outage events

15s
Total outage time

6s
Longest single outage

0
Logging gaps

0s
Total logging-gap time

▶ Outage events (Service/Serving Cell Status not up)

▶ Logging gaps (timestamp discontinuities)

3. Threshold Pass / Fail (in-spec %)

scored — feeds the combined index

METRIC	SAMPLES SCORED	BAND SPLIT
SINR	251742	25.9% pass 74.0% marginal 0.1% fail
RSRP	251952	0.0% pass 69.0% marginal 31.0% fail
RSRQ	251952	2.0% pass 62.5% marginal 35.5% fail
RSSI (LTE/5G NSA)	251952	95.2% pass 4.8% marginal 0.0% fail

▶ Threshold settings (editable — click Recalculate after changing)

9.6

4.5

-0.6

-5.7

07-24 03:36

07-24 17:36

07-25 07:35

07-25 21:35

07-26 11:35

07-27 01:36

RSRP (dBm)

-96.0

-102.0

-108.0

-114.0

-120.0

07-24 03:36

07-24 17:36

07-25 07:35

07-25 21:35

07-26 11:35

07-27 01:36

RSRQ (dB)

-10.1

-12.8

-15.5

-18.2

-20.9

07-24 03:36

07-24 17:36

07-25 07:35

07-25 21:35

07-26 11:35

07-27 01:36

TELECOMTEST SOLUTIONS

Post Processing Tool (option)

- Logo branded, client-ready report in minutes — PDF, offline HTML
- Full RF analytics: RSRP, RSRQ, SINR, RSSI with KPI pass/fail/marginal grading against customer-specific or per-band thresholds
- LTE + 5G NR (SA & NSA) side by side, with automatic technology, band and carrier detection
- Before/after comparison mode — prove the uplift of a new IBC/DAS deployment with delta maps and delta KPI tables

Indoor

- Per-level floor plan plots for every metric, with distribution and CDF charts
- Multi-floor building summary: one KPI matrix across all levels, instantly spotting the weak floor
- Auto-generated punch list: zones failing KPI thresholds flagged with location, metric, and severity

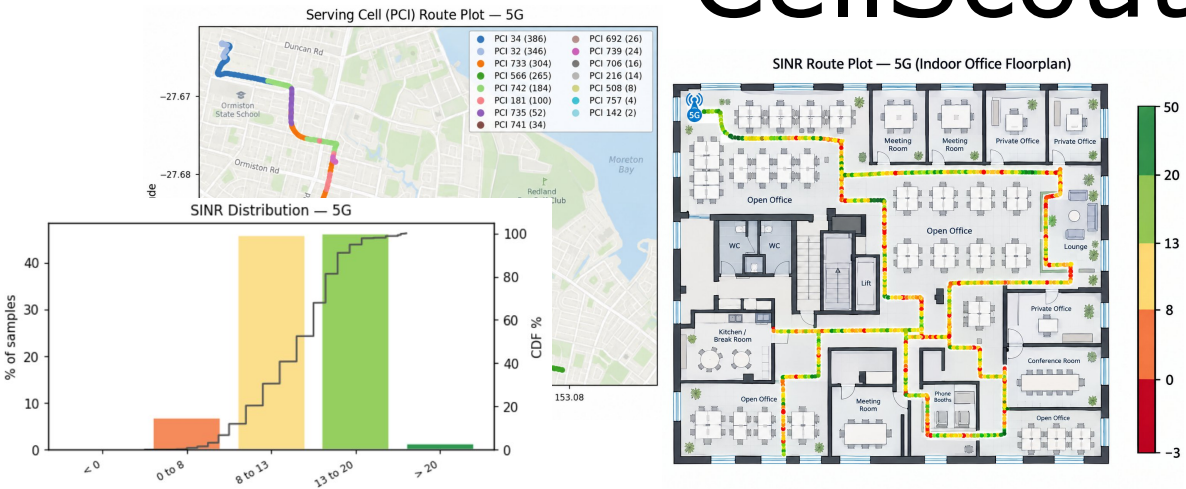
Outdoor

- Geo-plotted routes plus KML/KMZ deliverables with per-sample popups
- Interactive web map (pan/zoom/filter by metric, band, PCI) embedded in the HTML report
- Cell-edge and handover analysis: where the device switched cells, ping-pong detection

Data & QoE

- Speedtest, latency and jitters loss reporting per level/area — full QoE story, not just RF
- Survey-condition transparency: band forcing, cell lock, antenna gain offsets logged on the report

CellScout



RF Statistics Summary — 5G (FDD NR5G)						
Metric	Samples	Min	Max	Average	Std Dev	KPI
RSRP	1,765	-129.00 dBm	-64.00 dBm	-90.80 dBm	11.38 dBm	55.01% > -95 dBm
SINR	1,765	0.00 dB	23.00 dB	12.02 dB	3.00 dB	87.99% > 8 dB
RSRQ	1,765	-29.00 dB	-11.00 dB	-13.45 dB	2.33 dB	—

Workflow & trust

- Batch mode: drop a folder of surveys, get a report per site plus a fleet-level roll up dashboard
- Template engine: your logo, colors, section order and disclaimers saved as reusable house styles
- Team-ready: consistent reports from every engineer, no more "everyone's own Excel"

OTA Updates

Software can be updated over WiFi or SIM Card with a single click

Roadmap:

- Emergency Dial Check
- IP Test Suite: Ping, HTTP Page Load, FTP
- Cloud VNC remote access
- Faceless Version (RF Probe with PoE)
- RF Versions for IoT and mmWave FR2 support
- Built-in Spectrum Analyser module

Logging of additional parameters available on request

APAC Regional Support

- HW/SW Support Center in Australia (*Melbourne / Brisbane*)
- Local Stock and Spare Parts
- Training Services
- Special Accessories

More than 230+ Units Sold to Telstra and other Customers in Australia

