

MCM Mobile Coverage Mapper

Measure wireless coverage where other tools can't reach. MCM measures, analyzes and optimizes existing industrial wireless networks, without modifying infrastructure or adding staff.

Featured

6+ RF technologies

240 MHz to 6.1 GHz

1 Hz GPS



THE PROBLEM

Invisible blind spots. Teams lack the information to find the root cause of communication problems and fix them efficiently.

Discontinuous measurement. Manual surveys are occasional and have no history. Every drive test is an isolated event.

Multi-vendor without integration. Several wireless technologies share the same site, and no tool correlates them on one map.

Decisions without data. Infrastructure planning relies on intuition instead of measured coverage, causing extra cost and rework.

FOUR MODULES

MCM Compact Coverage Analyzer · In production
Standalone Windows app that maps mesh, PtMP, Wi-Fi and LTE coverage with GPS, blackouts and throughput tests.

MCM OFA LTE/5G Measuring Unit · In development
IP67 indoor and outdoor probe that logs RSRP, RSRQ, SINR, Wi-Fi and spectrum with GPS, 24/7 from vehicles.

MCM Center Coverage Platform · In development
Enterprise platform for multi-vehicle heatmaps, automatic fault diagnosis, RF planning and SLA reports.

MCM Scout Field Survey Tool · Planned
Technician tool for manual coverage audits where vehicles cannot go: indoors, walkways and heights.

WHAT EACH MODULE DOES

Capability	Compact	Scout	OFA	Center
Connectivity measurement (SNMP, ICMP, throughput tests)	✓	✓	✓	✓
Handover and blackout detection	✓	✓	✓	✓
LTE / 5G NR radio metrics	—	—	✓	—
Passive Wi-Fi scan	—	—	✓	—
RF spectrum 240 MHz to 6.1 GHz	—	—	✓	✓
Vibration and road roughness	—	—	✓	✓
Live map, dashboards and replay	✓	—	—	✓
Automatic diagnosis and area comparison	—	—	—	✓
RF link planning and simulation	—	—	—	✓
Site inventory, alarms and SLA	—	—	—	✓
Reports PDF, DOCX, XLSX, KMZ	✓	—	—	✓



SIX PROCESSES WHERE MCM ADDS VALUE

- 1. Plan.** Design and relocate RF infrastructure with link budgets, line of sight and coverage simulation calibrated with field data.
- 2. Deploy.** Plan drive tests by route, survey areas without vehicle access, and validate installations before and after.
- 3. Operate.** Monitor fleet and network 24/7 without an operator, with up/down/degraded status and alerts.
- 4. Diagnose.** Separate vehicle, zone and interference causes automatically, and rank the worst vehicles and areas.
- 5. Manage spectrum.** Validate the channels in use and detect signals in unauthorized channels.
- 6. Decide.** Availability, SLA compliance and correlation with fleet systems in management reports.

WHY MCM

- One platform.** Mesh, point-to-multipoint, Wi-Fi and LTE/5G on one unified map.
- 100% georeferenced.** Every sample carries its GPS position. No manual correlation.
- Field evidence.** Real network, real operating conditions, not simulations.
- Autonomous.** MCM OFA measures the whole fleet continuously.
- Scalable.** Compact for a pilot, Center and OFA for the full operation.
- Built with operators.** Designed and validated with active mining operations.

Modular licensing: start with one technology and one device, then add technologies, devices, geofencing and terrain simulation as the operation grows.

100% B2B. MCM is supplied through ITTC partner companies specialized in each vertical. Contact us for a briefing, a pilot or the partner in your sector.

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