



AIQ^{3D}

A 3D digital twin for mobile network coverage, planning, and autonomous networks





AIQ^{3D} turns the network into a place you can walk through — not a chart you have to interpret.

The Challenge: Networks Are 3D. Most Tools Aren't.

Operators today plan, monitor and troubleshoot networks using flat, 2D maps — but their customers live, work, and connect inside three-dimensional spaces: skyscrapers, shopping malls, hospitals, stadiums and dense urban canyons. The result is a chronic blind spot.

The cost of the blind spot shows up everywhere. For instance:

Customer churn where premium users on the 23rd floor experience drop-outs that no 2D heat map can explain.

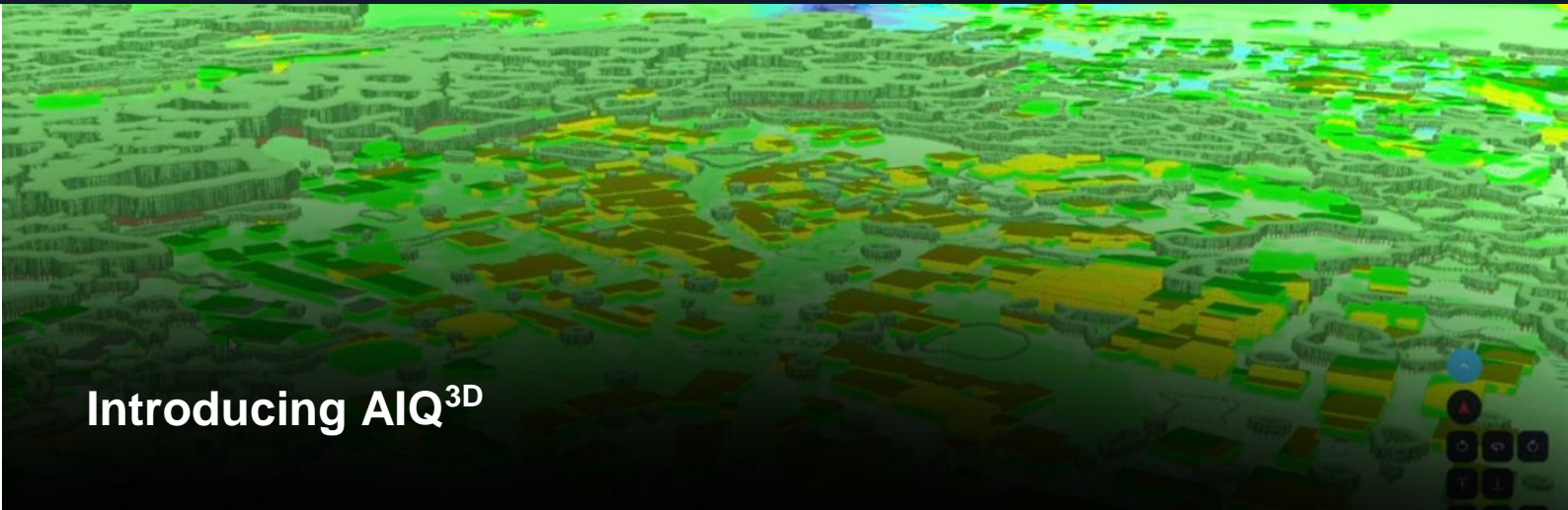
Wasted CAPEX on cell sites optimized for street level while the buildings around them stay underserved.

Slower 5G rollouts because indoor and high-rise coverage cannot be validated visually before the rollout.

Friction with stakeholders when planners struggle to communicate coverage realities to them.

You cannot optimize what you cannot see.

The next generation of customer experience demands a network view that thinks in volumes, not lines.

A 3D digital-twin view of a city with signal strength overlays in green and yellow. The text 'Introducing AIQ^{3D}' is overlaid on the bottom left of the image.

Introducing AIQ^{3D}

AIQ^{3D} is Aircom's 3D digital-twin viewer for mobile networks. It transforms the way operators see and act on their network by combining real-world building geometry, live cell-site data and signal-level intelligence (RSRP) into a single, interactive 3D experience — running natively on the planner's desktop.

- ❖ A 3D geospatial viewer built specifically for telecom RF engineers.
- ❖ Visualize signal strength (RSRP) directly on real 3D buildings — floor by floor.
- ❖ See cell towers, antenna beams, vegetation, and heatmaps—all in one scene.
- ❖ Runs desktop app or Docker app — with or without browser.
- ❖ Supports multi-city projects simultaneously.

Designed for modern RAN planning and optimization teams, AIQ3D brings greater spatial clarity to coverage analysis, indoor visibility, network planning, and customer experience investigations.

In one view, planners and engineers can fly across a city, drop into a single building, and inspect coverage floor-by-floor—exactly the way customers experience it.

How AIQ^{3D} Fits Into Your Operation

AIQ^{3D} is a desktop-native solution that complements existing planning, OSS and customer-experience systems. It connects to operator data and Aircom's broader portfolio to produce one integrated view—without disrupting current workflows.

Connects To	What It Adds
Operator network data (cell sites, antennas, KPIs)	Live, accurate 3D representation of the real network.
Building & terrain data (3D tiles, voxel models)	Realistic geometry for coverage and propagation analysis.
RSRP / signal-level measurements	Quantified customer-experience layer in 3D.
Aircom RAN automation suite	A natural extension of existing planning and optimization flows.



Delivered as a licensed Windows desktop application or Server based and runs inside the operator's environment — no customer data leaves the laptop unless explicitly configured.



Key Benefits



Immersive 3D Network Analysis

Explore mobile networks through rich interactive 3D scenes that combine building geometry, signal intelligence, and network context in a single environment.



Interactive Indoor Visibility

Reveal internal coverage layers using transparency modes and interactive scene controls without losing spatial awareness of the surrounding environment.



Smarter Network Investment

Visualize coverage against real-world environments to support more informed planning, densification, and infrastructure investment strategies.



Advanced Coverage Filtering

Use dynamic filters, customizable RSRP ranges, and heatmap controls to isolate weak-signal areas and focus analysis on what matters most.



Floor-Level Coverage Visibility

Inspect signal behavior across individual building floors to better understand indoor coverage conditions and high-rise performance challenges.



Faster Planning & Operational Analysis

Accelerate coverage investigations, optimization workflows, and planning cycles through intuitive 3D exploration and spatial network analysis.



Use Cases



Enterprise Coverage Assurance

Give enterprise customers and account teams a realistic 3D view of indoor coverage performance across offices, campuses, hospitals, and commercial environments.



Indoor & High-Rise Analysis

Explore signal behavior floor-by-floor inside complex urban structures to identify indoor coverage gaps and better understand subscriber experience in vertical environments.



5G & Densification Planning

Visualize coverage and network behavior against real-world urban geometry to support small-cell placement, densification strategies, and rollout planning decisions.



Customer Experience Investigation

Investigate coverage issues within the exact buildings and environments where subscribers experience poor service, enabling faster and more targeted analysis.



Interactive What-If Planning

Explore how coverage conditions may change across buildings and environments when evaluating planned network upgrades, densification, or optimization scenarios.



Regulatory & Stakeholder Engagement

Communicate network coverage and deployment strategies more effectively through immersive 3D visualizations designed for executives, regulators, municipalities, and customer-facing teams.

About Aircom

Aircom is a leading provider of RAN planning, optimization and automation solutions to communication service providers worldwide.

A wholly owned subsidiary of TEOCO, Aircom combines 30 years of telecom domain expertise with intelligent analytics and AI-driven automation to support the evolution toward autonomous networks.

This is critical when dealing with complex services like fixed wireless access (FWA), 5G standalone, private networks, and IoT where everything needs to work in harmony to deliver a supreme customer experience. Through advanced analytics, our products provide actionable and measurable insights into network and customer behavior.

Cutting-edge products and services.

Market-leading solutions for addressing today's complex RAN environments.

Innovation is in our DNA.

We have the latest AI/ML-powered algorithms, automation, and new services to revolutionize your RAN.

Trusted by the world's leading service providers.

With 125+ customers in 100+ countries, we have the knowledge and experience you're looking for.

With decades of experience and a customer list that spans the globe, Aircom helps its customers improve service quality, resolve network challenges, automate processes, and establish a competitive edge.

Trusted globally

2000+

Users logins into aircom tools daily

125+

CSPs run their networks using aircom tools

100+

Countries with active aircom tools & services