

# Site survey datasheet

## What is a site survey?

A site survey is an assessment of your wireless environment used to design or evaluate a network. It helps determine:

- Where to place access points
- How signals behave in your environment
- Where interference or coverage gaps may occur

## Key benefits



### Reliable performance

Consistent connectivity in every operating condition



### Optimized coverage

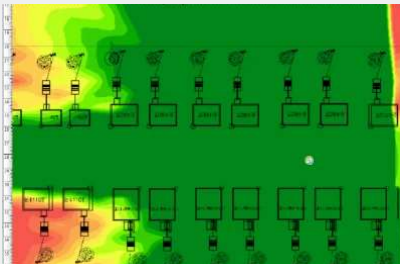
No dead zones or weak-signal blind spots



### Efficient & cost-effective deployment

Right hardware, right placement, first time — avoiding rework and unplanned spend

## Two types of site surveys



### Predictive site survey DESIGN PHASE

Uses floor plans, building materials, antenna characteristics, and RF modeling software to simulate wireless coverage before hardware is installed. Allows you to:

- Plan access point placement
- Estimate coverage and roaming performance
- Design the network intentionally, not reactively



### On-site survey VALIDATION & TROUBLESHOOTING

An HMS wireless expert travels to your site to perform real-world measurements and assess your wireless environment in actual operating conditions. Allows you to:

- Identify interference and environmental effects
- Troubleshoot issues in existing networks
- Validate your network design with real measurements

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## Required input

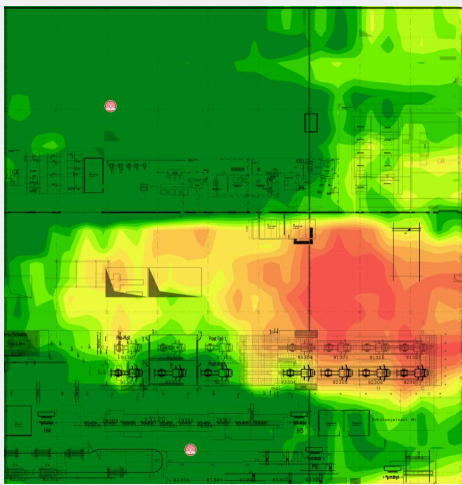
- Description of included machines, PLCs etc.
- Information about protocols used
- Floor plans and building blueprint (required for predictive surveys)

## What you receive

- Coverage maps (signal strength heatmaps)
- Interference analysis (signal-to-interference ratio)
- Recommended access point placement

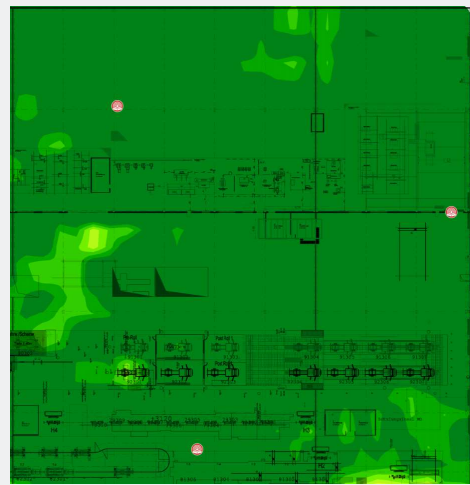
## Before and after: improving wireless coverage

These examples show how a site survey improves wireless performance by identifying coverage gaps and optimizing access point placement.



### BEFORE

Two access points left parts of the installation with weak coverage. The production line blocked the wireless signal, creating areas with weak connectivity, shown as red and orange zones in the coverage map.



### AFTER

A third access point was added, providing consistent wireless connectivity throughout the installation, as shown by the green zones in the coverage map.

## Recommended approach

To achieve reliable wireless performance in industrial environments, both planning and real-world validation are essential. Industrial sites often include metal structures, heavy machinery, and other sources of interference that are difficult to simulate accurately.

### HMS RECOMMENDS

1. **Predictive survey** to design the network
2. **On-site survey** to validate & optimize

## Request your site survey today!

Scan the QR code or visit [hms-networks.com/professional-services](https://hms-networks.com/professional-services)

