

## Wireless Site Survey

Although deploying IEEE 802.11 wireless technology in an industrial environment has some advantages over a traditional cabled network, there are additional factors which must be considered to ensure a successful implementation.

A wireless network requires all the planning of a traditional network, plus a lot more. The first step to successful wireless deployment is a wireless site survey.

### The key issues

A corporate network must be reliable, predictable, and secure under all circumstances. The purpose of a site survey is to reduce the unpredictability associated with wireless networking. What is the optimum number of access points? Where should the access points be placed? Where are the potential sources of interference? What data throughput and reliability can be achieved? What security mechanisms will be deployed?

A predictive wireless site survey is the first step. This will provide a general guideline for the quantity and the location of the wireless equipment. The wireless network will later be fine-tuned during an onsite wireless site survey.

### Which advantages you should exploit

With decades of experience in industrial networking, the Belden Competence Center is now focusing its expertise on the challenge of implementing wireless networks in hostile environments. Our technicians have the latest technological knowledge, and are equipped with high-end professional survey tools.

We will design a wireless network which is cost-effective, meets your business requirements, accommodates your unique environmental conditions, connects seamlessly to any existing network, and conforms to national regulations. An investment in a reliable wireless future.

#### What we do for you

##### Predictive Wireless Site Survey

- Estimate access point placement
- Select antennas
- Estimated data throughput
- Suggest channel selection
- Design load balancing
- Assess wireless bridging possibilities
- Design redundancy methods
- Propose encryption techniques
- Indicate authentication methods

##### Onsite Wireless Site Survey

- Detect existing WLAN equipment
- Determine access point placement
- Measure signal strength, distance, and Signal to Noise Ratio
- Verify and eliminate obstacle-induced signal loss
- Verify data throughput
- Verify Client Roaming
- Describe site survey methodology
- Provide site diagrams with hardware placement, RF coverage, and data throughput
- Suggest hardware configuration

