

# **In-Building Wireless Solutions**

Are Your Facilities Ready for the Revolution?

We build, connect, power and protect the world.





Mobile communications connect people to work, entertainment and each other in ways that boost productivity and enhance lives. However, a building's structure can block users from receiving a call or a life-saving alert. **In-building wireless** (**IBW**) communications provide the critical link to enable the use of mobile phones, pagers, PDAs, two-way radios, wireless LANs, emergency communications and wireless building system devices within an enclosed structure.

## **How In-Building Wireless Works**

Through the use of specialised equipment, **distributed antenna systems (DAS)** can be installed in nearly any structure, including hospitals, schools, airports, office buildings and stadiums to enable the use of wireless devices, technologies and applications. By using the signal from a mobile operator, DAS propagates the signal via strategically positioned antennas throughout the building to extend the reach of the signal and provide users with expected service.

#### **Utilising Wi-Fi**

Wi-Fi is an integral component of an IBW network that allows cost-effective deployment of a local area network. However, the traffic demand can overwhelm a Wi-Fi service if not properly deployed and new standards can make enterprise deployment complex.

To successfully utilise Wi-Fi, the Wi-Fi architecture needs to be outfitted with wireless access points (WAPs) connected with high-speed cabling. Determining where to install these WAPs can be challenging, but industry standards make recommendations for common installations.

## In-Building Wireless Example

- 1 Active Das
- 2 Filters
- 3 Repeaters/Bdas
- 4 Antennas
- 5 Coax and Connectors
- 6 Assemblies (Coax and Fibre)
- 7 Racks
- 8 Fibre and Hardware
- 9 Power
- 10 Test Equipment
- 11 Access Point
- 12 Enclosure
- 13 Switch









## The Mobile Workplace is Here



## Productivity is moving to the mobile device. Help employees stay connected.

As the Bring Your Own Device (BYOD) trend has more and more of your employees conducting work on their personal mobile devices, your need to provide wireless coverage throughout your facilities to securely aid constant operations increases. Our tailored IBW technologies provide a scalable solution that uses carrier-approved products to add flexibility throughout the system. We offer a complete line of cutting-edge products, technical expertise and supply chain solutions to help provide a fast and efficient deployment of your specific IBW network, helping to bring enhanced productivity and mobility to your workforce. Delivered and installed by qualified integrator partners, we can help you find a robust and effective solution to the complex challenge of meeting today's mobility needs.

### The Complete Wireless Solution

Wesco Anixter offers a number of solutions from leading DAS and Wi-Fi manufacturers. These solutions include electronic components, cabling infrastructure, pathway and support products, and installation-related materials.

The Wesco Anixter team includes trained and experienced IBW specialists, sales representatives and technical resources capable of recommending designs, products and best practices. Our core distribution network provides products, coordinated deliveries and supply chain solutions for an accurate, timely and environmentally responsible installation.

#### **Rely on Our Technical Expertise**

You'll have access to the highest level of technical engineering services and knowledge through the qualified industry experts and engineers working in our labs all over the globe.

Whether you want to know more about the latest BYOD trends and DAS applications and technologies or would like assistance applying Wi-Fi standards to your enterprise, we have the answers and experience to help you make informed choices.

Our dedication to delivering quality technologies to you comes to life in our U.S. based Innovation Center and in our EMEA Solutions Briefing Centre (SBC), located near St Paul's in central London. These unique facilities allow our technical experts to evaluate, demonstrate and educate, so you are better equipped to make the application and technology choices most suited to your requirements.

Providing an impartial, hands-on experience, we welcome SBC visitors who wish to:

- Conduct proof of concept testing for systems interoperability
- Determine optimal cabling solutions for high-speed data
- · Evaluate the latest technologies
- Test solutions that integrate the logical and physical elements of a building's data, voice, video and automation systems

#### **Best-in-Class Wireless Partners**

Because we work closely with a select network of experienced integrators that provide turnkey wireless solutions, you are assured the highest quality customer experience with best-in-class wireless communications products and technologies.

These integrators offer many services as well, including:

- · Benchmark surveys
- · RF engineering and design
- · Carrier coordination
- · Deployment and installation
- · Test and turn-up
- · Monitoring and ongoing maintenance



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