

Indoor Coverage From Outdoors

BelAir Networks mobile networking solutions are designed to deliver ubiquitous, high capacity data, video and voice services in medium- and large-scale public and private venues. The highly integrated outdoor cellular LAN platforms that are the foundation of BelAir Networks unique, multiple point-to-point mesh architecture can provide complete coverage by illuminating buildings from the outside.

This innovative solution enables the creation of profitable public and cost-effective private, medium- and large-scale wireless networks because it:

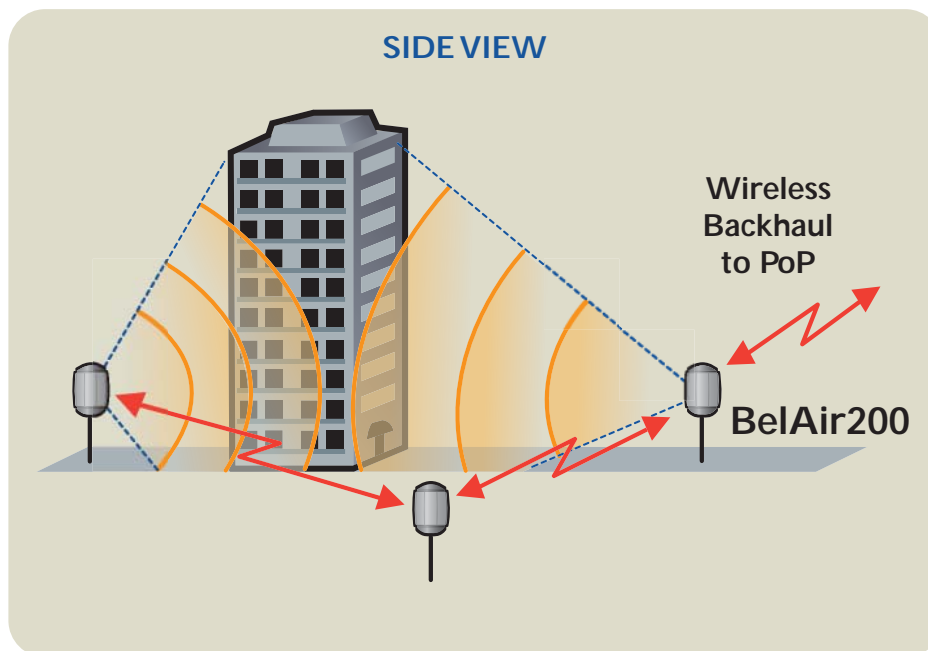
- eliminates the need for cables, extra switches and routers to interconnect wireless nodes

- requires five to ten times fewer access points compared to indoor solutions
- eliminates disruptive, in-building network deployment
- reduces WLAN capital expenditures by up to 70%
- reduces WLAN operating expenditures by up to 90%
- eliminates T1, DSL and other backhaul costs
- provides five to ten times more capacity and five times more coverage compared to traditional wireless mesh architectures

Traditional Solutions Complicated and Costly

Traditional indoor solutions to WLANs are complicated and costly. Multiple access points, endless feet of cable to and from switches and routers, security issues and maintenance requirements create obstacles that complicate and increase the cost of deployment.

The reason is that the majority of indoor solutions are constrained to coverage on single



BelAir Networks Building Deployment

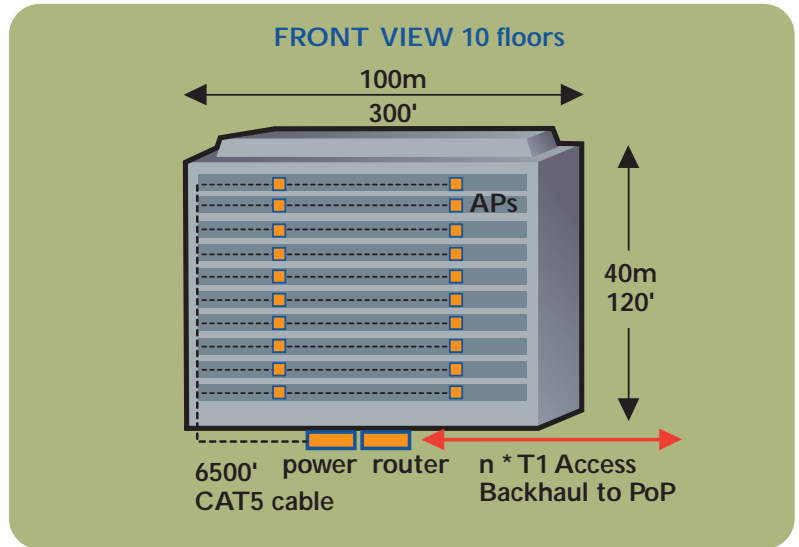
floors because penetrating reinforced concrete is challenging. To provide coverage to other areas, multiple units per floor are required. Since every indoor unit requires power and LAN connectivity, the deployment is complex and costly.

The BelAir Networks approach eliminates these complications and simplifies the process.

Profitable and Cost-effective BelAir Networks Coverage

BelAir Networks outdoor, cellular LAN platforms can be easily deployed within line of sight or near line of sight of a building, at which point the radio waves penetrate the building windows or walls to illuminate the entire interior. In this way, a single BelAir Networks platform can cover multiple floors at once.

With a BelAir Networks solution a typical 10-floor mid-sized building 234 ft. wide by 72 ft.



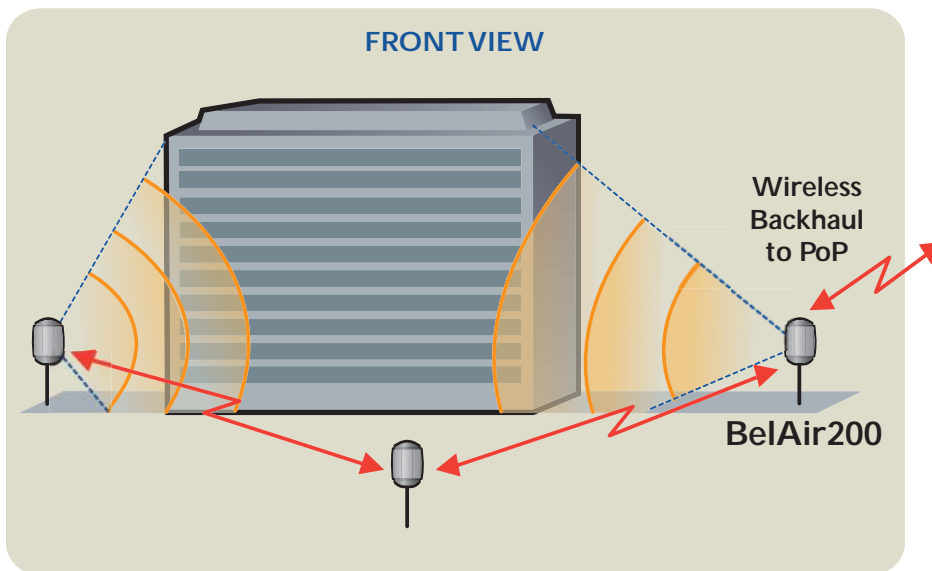
Traditional Building Deployment

thick by 144 ft. high can easily be covered with two to four BelAir200s located outside the building 50-100 ft. away.

To provide the same coverage with an indoor solution would require a minimum of 20 indoor access points (i.e. a minimum of two per floor), with 1000s of feet of associated wiring.

An added advantage is that deploying a BelAir Networks solution eliminates the need to have access to the building for installation. BelAir Networks cellular LAN platforms can be readily deployed on existing infrastructure such as light poles and adjacent buildings.

The same BelAir Networks platforms can also be used to cover very large, near line-of-sight areas as well, at distances of three-quarters of a mile or more.



BelAir Networks Building Deployment

Integrated Multiple Radios Improve Coverage and Ease Deployment

What makes the BelAir Networks solution effective is the ease of deploying access where it is needed. This has been uniquely enabled by BelAir Networks integration of multiple Wi-Fi access and backhaul radios in a single compact package.

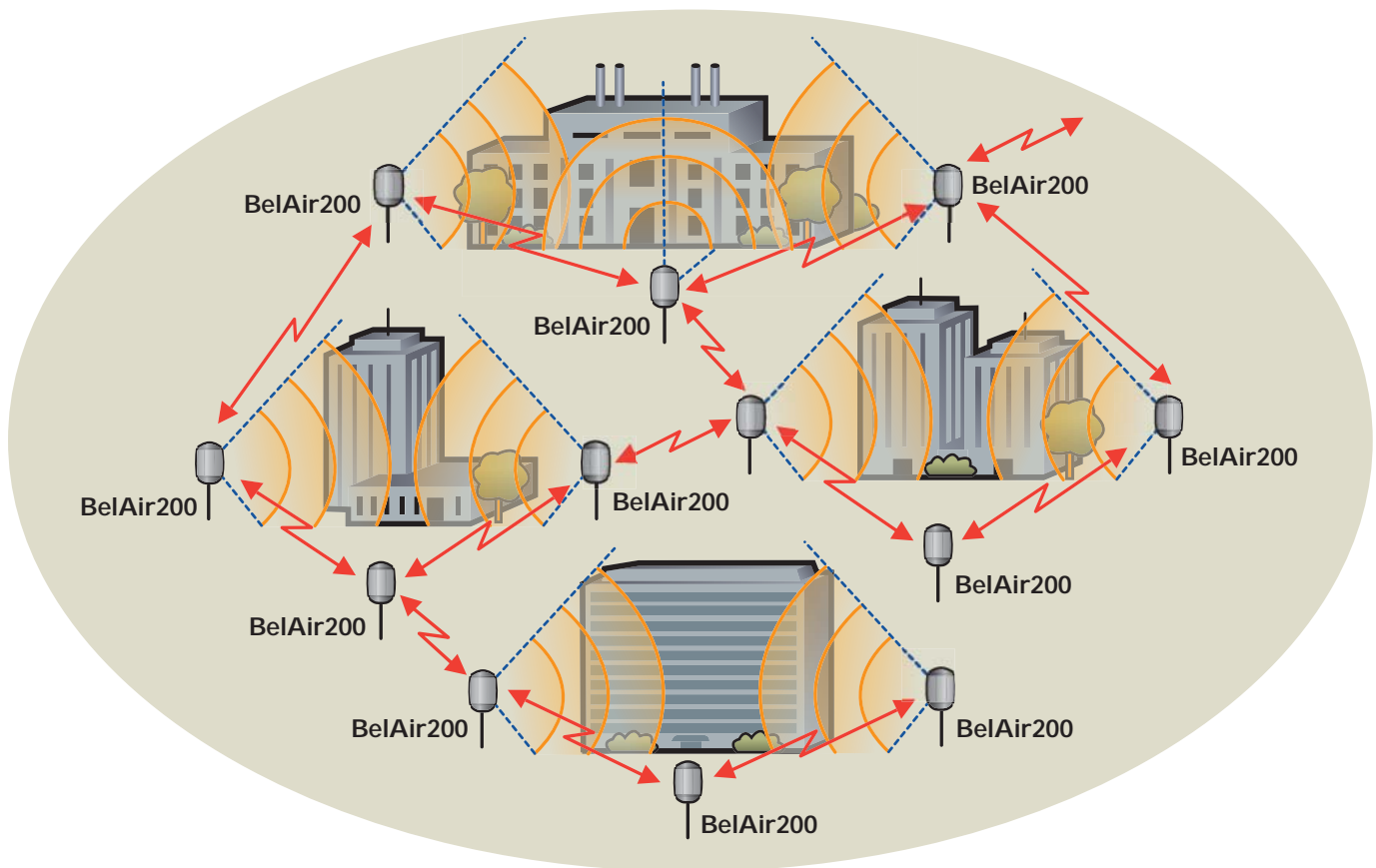
In traditional solutions, when a nearby radio transmits, the other receivers are significantly desensitized due to the coupled power into their antennas.

BelAir Networks has reduced the coupling between integrated backhaul antennas to enable

the co-location of radios. Further enhancements to key transmit and receive parameters of the backhaul radios ensure that each can receive at their sensitivity limit while the other radios are transmitting at full power.

Each of BelAir Networks backhaul radios delivers industry-leading receive sensitivity and increased transmit power compared to standard solutions. This creates a further increase in reach.

BelAir Networks access radio enhancements include industry leading receive sensitivity and transmit power, and full cross polarization antenna diversity for the best possible performance in outdoor to indoor deployments.



BelAir Networks Campus Deployment

The integrated access antennas provide a directional pattern suitable for the majority of deployments, from low-rise suburban office buildings and campuses, to high-rise urban towers. Connectors are available for connecting external antennas, if required.

Hassle-Free WLAN With No Limits

BelAir Networks solutions provide hassle-free cellular LAN networking options that enable the deployment of profitable public and cost-effective private wireless networks by service providers and enterprises for:

- **Hot zones** such as business districts, office parks, airports, hotels, conference centers, recreation areas, and shopping malls
- **Hot spots**, such as coffee shops, book stores, office buildings
- **Campuses**
- **Corporate offices, manufacturing centers, universities, hospitals, research parks, municipal centers**
- **Apartment buildings**
- **Complex shaped buildings**
- **Buildings where it is difficult to add cables**

For these applications, BelAir Networks solutions go beyond basic hot spot Wi-Fi to provide low-cost, mobile networking without limits.



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