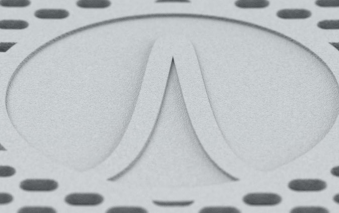




# Greatly Increased Business Flexibility

with Intelligent In-building  
Wireless Backhaul



## THE AIRVINE STORY

Airvine's WaveTunnel™ technology represents a completely new approach to indoor broadband networking for the enterprise. It combines intelligent distributed switching with broadband wireless to create a system with greatly enhanced flexibility and versatility. Each WaveTunnel node has both wired (GigE) and wireless ports, with the latter using the V-band up at 60 GHz to deliver gigabit/sec data transfer rates. Moving the switching function closer to the users enables a solution that is quick and easy to deploy, and supports very fast moves, adds, and changes. The modern network must be able to adapt quickly to the changing needs of the enterprise, and that is the cornerstone of the Airvine solution.

## OUR VALUE PROPOSITION

### Quick and easy moves, adds, and changes (MAC).

How often does your backhaul network need to be reconfigured? Is it once a month or once a year? Does this need to happen quickly? How long does it take to get your structured wiring contractor back to make the necessary changes? A general rule is that over the course of 4 to 5 years, you'll have as many MACs as the number of drops originally installed.

# 100X

With Airvine technology you can make the change yourself in a few tens of minutes versus waiting a month or two to get a contractor on-site. The end-result is anywhere from 10 to 100X faster for moves, adds, and changes.

### Fast retrofits are often required to support new broadband access technologies like Wi-Fi 6/6E.

Many businesses are closed at night and on weekends so if wire must be pulled, it can be done in off-hours. Other businesses don't have the luxury of downtime and can't tolerate long disruptions. This list includes hospitals, hotels, factories, airports, transportation hubs, data centers, and the list goes on. Does your business fall into the latter category?

With Airvine technology you can quickly add backhaul capacity to handle a retrofit for an essential business application. This can be done in a few tens of minutes with your own people.

### Easily deployed in any kind of building with no disruptions of any kind.

Concrete ceilings, sheetrock ceilings, drop ceilings, it just doesn't matter with WaveTunnel technology. On the other hand, the type

of building matters greatly to a cable contractor. Drop ceilings can make for an easy cable install, whereas concrete or sheetrock can be much more problematic.

Airvine technology uses a high-gain beamforming antenna to punch a 60 GHz signal through most building materials and our software can also route around obstructions.

### Great solution when leasing space in a building.

It's usually the case when upgrading the network in a leased facility that the tenant must pay. This becomes a large sunk cost as you can't take copper wire with you when you move.

With Airvine technology, you can easily take the backhaul network with you when you change locations.

### Great solution when adding new access networks for IOT or augmented reality.

If either of these are in your future that could spell trouble if you are locked into structured wiring to support your backhaul needs. How likely are you to need another Wi-Fi access network in the very near future? Private 5G is also just around the corner.

It almost always pays to put OT traffic on a separate network for security reasons. The IT network tends to be more vulnerable to an attack because of all the email traffic. WaveTunnel nodes can support 4 drops per location, so if another drop is required it can be quickly added. There is no need to overbuild.

## TIME FOR A TEST DRIVE

A nice feature of WaveTunnel technology is that it is easy to try out. No RF skills are required, no contractor is needed, you can start small, and it can be a DIY (do-it-yourself) project. There is no need to upgrade your entire network. Instead, focus on an area with old copper cable that needs an upgrade to support Wi-Fi 6/6E, or a new location that requires wireless to support an IOT deployment.



The initial deployment can consist of as few as two or three nodes to get a feel for the technology:

- See how quick and easy it is to deploy
- See how easy it is to configure with the Smartphone APP
- Have one person do the install
- Check out the gigabit/sec data transfer rates
- See how quick and easy it is to make moves, adds, and changes
- Try repurposing the node if copper is later brought to that location
- And you can take the network with you when you move. A very nice feature if you are leasing space.

This trial will be so quick and easy that you'll find yourself connecting locations that were previously just too hard to reach, even when you control the right-of-way.

## AIRVINE MAGIC

But aren't there issues with using 60 GHz indoors? Can it really punch through interior walls? When trialing the technology, you'll see that it can "punch through" just about any commonly used building material. The key to making this happen is advanced beamforming technology. In the V-band up at 60 GHz band, an array with 256 antenna elements can fit on 20 cm<sup>2</sup> of circuit board space and deliver up to 30 dBi of antenna gain (1000x).

WaveTunnel technology isn't just a high-performance beamforming array, it is also an intelligent switch running sophisticated software that allows traffic to be relayed through an intermediate node or add/dropped locally. The system can also be configured to operate in a dual counter-rotating wireless ring for enhanced survivability.



The next generation of in-building wireless backhaul is here and it's time to get on the WaveTunnel train. For more information, please visit us at [www.airvine.com](http://www.airvine.com).

## ABOUT AIRVINE

Airvine is a fast-growing Silicon Valley innovator of intelligent broadband wireless backhaul solutions for the enterprise. The company has developed the industry's first in-building 60 GHz wireless system that exceeds the speed and rivals the reliability of existing structured wiring solutions at a fraction of the deployment time and cost. Patented RF innovations extend the range and gain of wireless signals, penetrating walls and steering around obstacles that impede transmission. Something never before possible within the 60 GHz band.

