



## Frequently Asked Questions

### **What is the difference between the WISPSpot™ and the 4-watt HotelSpot™?**

The WISPSpot™ can cover several acres or up to a square mile to provide Internet coverage to 100 clients. The 4-watt HotelSpot™ can connect up to 45 wireless clients to the Internet inside a wooden, concrete, cinderblock, or brick hotel. Both the WISPSpot™ and the 4-watt HotelSpot™ come with a directional panel antenna. The antenna beam is shaped spherically in the 4-watt HotelSpot™ and is typically used inside a hotel, one HotelSpot™ per floor or one HotelSpot™ per every other floor on average. The WISPSpot™ can be used by itself as the only transmitter for a given wireless site or several can be used together since its beam is more directional, covering a long rectangular area.

### **What is the difference between the Enhanced HotelSpot™ and the WISP-Spot™?**

Both of these HotelSpots™ have Power-over-Ethernet but one has a bidirectional amplifier to increase *client* signal strength back to the transmitter. The Enhanced HotelSpot™ broadcasts more omni-directionally than the WISP-Spot™. Neither can be used inside a cement, brick, or block building. They will perform best only when mounted in a wooden building or when used outside. The Enhanced HotelSpot™ can be mounted almost anywhere but if inside, it should also be in a wooden structure, and if outside, it should cover an area of no more than 6 to 10 acres. The WISP-Spot™ can generally broadcast to 50 acres or more. The WISP-Spot is a modular system and several of them can be used to accommodate large numbers of clients.

### **What if I purchase a HotelSpot™ and determine I need a different model? May I return the equipment and upgrade to another model?**

Yes, OMNI-WiFi has a thirty-day (30-day), full-refund return policy. If you want to upgrade, 100% of your original cost, except shipping costs, will be applied to the upgrade.

### **What if I install the HotelSpot™ but I am unable to get a connection to the Internet?**

OMNI-WiFi has a toll-free 24/7 technical support number if you need help with installation. Simply call 1-800-610-6711, ext 7 for technical support.

### **Is there a discount if I buy multiple units?**

Our HotelSpots™ are priced at the lowest cost per client anywhere for the highest output available. Depending on the number and type of HotelSpots™ purchased, or for a system that use several different products, OMNI-WiFi and its distributors and resellers will offer discounts.

### **How do you protect the HotelSpots™ from weather conditions such as snow, rain, wind, or lightning? How long can I expect my unit to hold up? What is your warranty?**

In indoor or outdoor conditions, the HotelSpot™ should function for at least 5 years. If you are expecting unusually severe weather, such as a hurricane or a tornado, disconnect the electricity from the HotelSpot™. If the HotelSpot™ is outside, temporarily tie a plastic bag around the whole HotelSpot™ until the severe weather lets up. We have a 2-year limited warranty that covers material and workmanship, but not damage from lightning, tornadoes, or flood. We do also sell battery backup protective equipment and recommend this for all outdoor installations.

### **Why can't I 'daisy-chain' the HotelSpots™ together wirelessly like some other access points allow?**

Actually, you can daisy chain the HotelSpots™ together. However, this technique is not recommended for *any* access point because of the severe reduction in bandwidth that occurs. Less than 50% of the original speed will be available to users when access points are daisy-chained together wirelessly. This is because the radio in the access point must act both as a receiver *and* as a transmitter at the same time. No single radio can receive at precisely the same time that it is transmitting. The radio must alternately receive and transmit very rapidly in order to repeat the original signal. Because it is receiving about 50% of the time, the effective transmission speed is cut in half. At least 3% more bandwidth is used up in wasted packet re-tries due to the radio congestion this technique causes. Therefore more than 50% of the bandwidth paid for is wasted when this technique is used and this fact applies to ALL access points where a single radio acts as a wireless repeater. This transmission mode is called 'half-duplex'.

### **Since the daisy chain technique causes half-duplex transmission and decreases the bandwidth so much, what is the proper way to repeat the broadband signal wirelessly?.**

The proper way to repeat wireless signals is to use 2 radios to make a wireless repeater. This transmission mode is called 'full-duplex'. Both radios are transceivers because they both send and receive packets of information. However, one radio can be thought of as the transmitter, and the other radio can be thought of as the receiver. The full-duplex repeater can send *and* receive different packets of information at the same exact time. Therefore high efficiency is achieved and at least 97% of the original bandwidth is available to users on the remote side of the repeater.

This 2-radio technique is also used to bridge physical obstacles to Ethernet or Fiber cable installations. For example, where a road or highway divides a network into 2 pieces, each segment can attach to the other via a full-duplex system with radios on either side of the road. This full-duplex system is call the OMNI-WiFi **Wireless Virtual Private Network (Wireless VPN)**. It is very effective where highways or other roads divide business campuses and it, too, provides 97% throughput from one side of the network to the other..