

## Veris Aerospond Wireless Sensors: Wi-Fi vs. Zigbee

Two of the most common wireless technologies that exist today are Wi-Fi (also known as 802.11) and Zigbee (also known as 802.15.4). So why should you use Veris' Wi-Fi sensors for your wireless control or monitoring system?

### **Mature Technology**

Wi-Fi is a mature technology with a huge base of billions of Wi-Fi devices installed in every part of the world. IT departments, business owners, home owners, teenagers, and grandparents understand how to connect devices to a Wi-Fi network. Tools are available (many are free) to monitor and manage Wi-Fi networks.

Zigbee is a proprietary and emerging technology with a much lower install base. Zigbee products from different vendors may not be compatible with each other. Unfamiliar to IT departments, Zigbee requires a new set of tools, and unless purposely configured to work together, Zigbee networks can become inoperable in areas where a strong Wi-Fi network is located as both Zigbee and Wi-Fi operate on the same 2.5 GHz radio frequency band.

### **IP Friendly**

Since Wi-Fi devices use an IP-over-ethernet networking environment, there is no requirement for an expensive gateway to handle functions like network address translation or custom provisioning. Veris' sensors are able to get unique IP addresses either via static assignment or through DHCP queries (see VWP16 for more information about DHCP queries).

Zigbee requires the use of a bridge to connect existing ethernet networks to the wireless devices.

### **Low Powered**

Up until recently, if you wanted a wireless battery operated sensor, you could not use Wi-Fi. Veris' battery powered sensors provide a similar lifespan to that of Zigbee. Using extremely low-powered Wi-Fi technologies combined with a shutdown between transmissions, Veris' battery-powered Wi-Fi sensors last up to 5 years.

### **Security**

Veris' sensors use the standard Wi-Fi well-proven encryption, authentication, and end-to-end network security.

Zigbee has limited tested security.

### **Wi-Fi Available Everywhere**

Due to the popularity of laptops, tablets, smart phones, and other portable devices, Wi-Fi access is now widely available in homes, businesses, government buildings, hotels, coffee shops, restaurants, and even highway rest stops. Installing a Veris Wi-Fi sensor is fast and easy. It will be sending data in a matter of minutes.

*For more information about the Veris Aerospond products, see VWP15, VWP16, and VWP18.*

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*The information provided herein is intended to supplement the knowledge required of an electrician trained in high voltage installations. There is no intent to foresee all possible variables in individual situations, nor to provide training needed to perform these tasks. The installer is ultimately responsible for ensuring that a particular installation remains safe and operable under the specific conditions encountered.*