



Wellspring & ZigBee™ Radios

What is ZigBee™?

ZigBee radios are used by Wellspring (and many others) to communicate building control and monitoring data using an open published communication protocol. The word "ZigBee" refers to that open protocol which builds on top of radio hardware which complies with the IEEE Standard 802.15.4. As such, any product that uses the ZigBee protocol, set up with the right security code, can communicate on any ZigBee or ZigBee Pro network. That is why ZigBee is actively supported by over 350 companies, including Emerson, Phillips, Texas Instruments, Samsung, Siemens, Sony, Whirlpool, NEC, GE Energy and Eaton, just to name a few.

Why Choose ZigBee?

The fact that ZigBee is an open protocol may be the most compelling reason to choose a ZigBee based system – but there are many more reasons:

Reliable Data Delivery:

ZigBee radios form a self-healing two way mesh network that delivers much higher data through-put reliability. If one node fails, another picks up the load. If messages are not acknowledged, the sender re-tries. If interference becomes an issue, the frequency of the network can be changed. ZigBee systems choose from 16 different channels.

Remote Control: Every ZigBee radio can receive as well as send, so every meter can accept control instructions. For example, you can curtail utility use if the apartment is vacant, or the resident does not pay their bill. ZigBee gives you control capabilities that no other radio network has.

One Network – Many Uses:

Maintain one popular network – add ZigBee applications over time. Like security monitoring, smart temperature control, time-of-use electric heater controls, intercom, and many more that are emerging. Don't get locked into one vendor's proprietary protocol – stay open.

Why Wellspring's ZigBee Network Application System?

Simplicity – every node informs the installer that it is joined and can pass data, at the moment of installation. There is no "programming" required – the "join" is automated, with feedback to the installer – green is good – red is not.

Large networks - Wellspring leads the world in large network ZigBee technology, with more large networks deployed successfully than any other company. Wellspring networks typically employ more than 1000 nodes, and cover entire apartment communities.

Diagnostics – Every Wellspring router node sends a "health packet" every 2 hours, telling us its routes, its neighbors, its children, and its link quality.

Speed – No network is faster in its ability to reach any network node from the gateway, or recover data and acknowledge. Speed increases network size.

For more information, contact Wellspring at 215-788-8485 or www.wellspringwireless.com