

## Challenge

Adding control to ac-powered devices in commercial and industrial applications can be very costly because of existing structures, long wire runs, code requirements, and recurring reconfigurations.

## Banner Wireless Value

- **Remotely control**—Lights, dimming levels, fans, and motors; use in conjunction with equipment monitoring sensors to stop motors remotely when potential issues are detected
- **Eliminate control wires**—The Sure Cross® Wireless system is a radio frequency network with integrated I/O that removes the need for control wires
- **Extend wireless range**—H15 model can be used as a repeater in a MultiHop wireless system
- **Reduce complexity**—Facility or machine reconfiguration made easier; great for retrofit applications
- **Monitor power**—Use a current transformer to monitor and analyze power consumption by using analog inputs
- **Easy, plug-and-play deployment**—The relays and wireless radio are housed in a single device, simplifying installation on existing equipment and enabling deployments in remote and hard-to-access locations where implementing a wired solution would be difficult, impractical, or not cost-effective



## Banner Wireless AC Node Control Solution

- 100–277 V ac supply voltage
- Ability to switch up to two 10 amp ac loads
- Rated IEC IP65
- 25 W courtesy power
- No separate power supply required
- Two discrete inputs and two discrete outputs
- Two 0–10 V dc analog inputs and two 0–10 V dc analog outputs
- AC-powered repeater for extending the signal distance in MultiHop radio applications (H15 model)

## Key Applications

- Control and dim lighting fixture banks in commercial or industrial facilities; backbone for IoT lighting control to increase security and energy savings without having to integrate into complex building management systems (BMS).
- Retrofit applications where it may be cost prohibitive to pull control wires to switches (conduit/sealed walls/long distances/rooftops), when AC power is already available at the device.
- Control motors and fans in remote locations or hard-to-reach areas; turn aeration fans on/off based on temperature or humidity inputs; shut down motors based on irregular vibration alarms (avoid catastrophic damage).
- Extend range of wireless signal by configuring as a powered MultiHop repeater for long material conveyors, large process facilities, or underground tunnels.
- Provide power and wireless control connectivity to remote I/O devices; in “clustered” I/O applications this drastically reduces wiring cost and complexity.
- Control material diverters or dampers in hard-to-reach facilities such as grain elevators; reduce wiring cost and minimize human intervention in hazardous or unsafe situations in tower installations.

Model	Description	Radio	Inputs	Outputs
DX80N9X7S-P15E	Performance Node	900 MHz	Two selectable discrete, two 0–10 V analog	Two AC/DC relay (SPDT), two PNP discrete, two 0–10 V analog
DX80N2X7S-P15E		2.4 GHz		
DX80DR9M-H15E	MultiHop Data Radio	900 MHz	Two PNP discrete, two 0–10 V analog	Two AC/DC relay (SPDT), two PNP discrete, two 0–10 V analog
DX80DR2M-H15E		2.4 GHz		