| Applications Include: | Pumps, Valves, Relays, Conveyors, Tank Level, Alarm Systems, PLC Activation, Data Monitoring, Automation |
|---|---|

# Wireless Automation System part #:80660S

The Wireless Automation System is a 900 MHz radio frequency network with integrated I/O that can operate in most environments while eliminating the need for wiring runs. Systems are built around a Gateway, which acts as the wireless network master device, and one or more Nodes.

- Pump Control
- Valve Actuation
- Conveyor Control
- Grain Augers
- Light Control
- Stackers
- PLC Activation
- Engine Control
- Wireless Automation

The Wireless Automation System is an industrial I/O device with six discrete DIP switch selectable inputs, and six discrete (sourcing) outputs, with DIP switches for user configuration. The system combines Frequency Hopping Spread Spectrum (FHSS) technology and Time Division Multiple Access (TDMA) control architecture to ensure reliable data delivery within the unlicensed Industrial, Scientific, and Medical (ISM) bands. The transceivers provide two-way communication between the Gateway and Node, including fully acknowledged data transmission site survey analyses. Lost RF links are detected, and relevant outputs set to user-defined conditions.
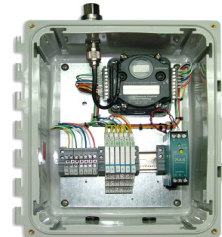
## Operation

The Wireless Automation System provides reliable monitoring, without the burden of wiring or conduit installation, and can operate independently of or in connection with a PLC and/or PLC Software. Each wireless system consists of one gateway and one or more nodes. The gateway device works as the master within each radio network system. The gateway initiates communication and reporting with the node. Each node can be connected to a sensor or output device and report back the state of the I/O to the master. The gateway and nodes can be arranged to extend the range (4 miles) of the network or to avoid obstacles in the transmissions path.
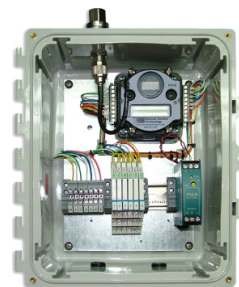
## Wireless Automation System Gateway Specifications

| | | |
|---|---|---|
| **Power Requirements** | Supply Power: 24 VDC (15 W power supply included) 100VAC-240VAC Input | **WAS Gateway Part #: 80660G**  |
| **Radio** | Frequency: 900 MHz distance up to 4 miles (Frequency Hopping Spread Spectrum) FCC Part 15 compliant (License Free) | |
| **Operating Environment** | Indoor or Outdoor Standard: 32° F to 122° F | The range of all radio products is dependent on local conditions and antenna selection/location. |
| **Discrete Inputs** | Input Rating: 3 mA max current at 30V dc Input Sample Rating: 62.5 milliseconds Input Report Rating: On Change of State 6 Dry Contact Inputs (Switch) | **WAS Node Part #: 80660N**  |
| **Discrete Outputs** | 100 mA max current at 30V dc ON-State Saturation: Less than 3V at 100 mA OFF-state Leakage: Less than 10 µA Output Update Rating. 125 milliseconds | |
| **Relay Outputs** | 6 Class C Relays Rated 6A @ 250V | |
| | | |

\* **The range of all radio products is dependent on local conditions and antenna selection/location.**