

Long Range Advanced System with HMI

Part # 80442SH

Wireless Control at Your Fingertips

The factory-programmed HMI lets operators activate switches, check status and review data on screen. Connect it to the internet for compatible mobile access. The Gateway and Nodes reduce long control-wire runs.



HMI ENCLOSURE



SYSTEM INTERIOR



Up to 5 Miles
Range (typical)



Integrated I/O
4 Discrete In / 4 Discrete Out
2 Analog In / 2 Analog Out



**Touchscreen
Control**
Status & Data



Remote Access
Internet
Connected

System Overview

The 80442SH combines Frequency Hopping Spread Spectrum (FHSS) and TDMA wireless technology with a factory-programmed touchscreen HMI. The Gateway manages two-way, acknowledged communication with one or more Nodes. The HMI presents status, control points and data configured for the installation. Lost RF links can set outputs to user-defined conditions. The transceivers provide reliable operation in the unlicensed industrial, scientific, and medical bands.

How It Works

The 80442SH provides monitoring and control without long runs of conduit or control wire. The Gateway initiates two-way communication with one or more Nodes, which connect to sensors or output devices and report I/O status back. Operators can activate switches, check status and review data on the HMI. With an internet connection, compatible mobile devices can access the system remotely. The HMI can be configured around the devices and information at each installation. Multiple Nodes can extend the network around obstacles in the transmission path.

Typical Applications

- Pump Control
- Flow Monitoring
- Conveyor Control
- Tank Level Control
- Pressure Monitoring
- Remote Monitoring
- Alarm Status
- PLC Activation
- Data Logging
- Industrial Switching

Specifications

Power Requirements	24 VDC (15 W power supply included) 100–240 VAC input
Radio Frequency	900 MHz (Frequency Hopping Spread Spectrum) Up to 5 miles, typical* FCC Part 15 compliant (License Free)
Operating Environment	Indoor or Outdoor Operating Temperature: 32° F to 122° F
Discrete Inputs	4 Dry Contact Inputs (Switch) Input Rating: 3 mA max current at 30 VDC Input Sample Rate: 62.5 milliseconds Input Report Rate: On change of state
Analog Inputs	2 Analog Inputs (4–20 mA) Input Sample Rate: 62.5 milliseconds Analog Report Rate: 1 second or on change of state (1% change in value) Accuracy: 0.1% of full scale +0.01% per °C
Analog Outputs	2 Analog Outputs (4–20 mA) Update Rate: 125 milliseconds Accuracy: 0.1% of full scale +0.01% per °C
Relay Outputs	4 Class C Relays Rated 6 A @ 250 VAC

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

Wireless Solutions for Every Application

Rugged. Reliable. Proven.



Stationary Solutions

Wireless Monitoring and Control for Industrial Applications

From short to long range, RCT stationary systems provide reliable wireless solutions for a wide variety of industrial and municipal applications.

- Short, Medium and Long Range Systems
- Digital and Analog I/O Options
- Standalone or Networked Configurations
- Integrates with Sensors, Relays, PLCs and Control Equipment
- Rugged, Industrial-Grade Design

Hand-Held Solutions

Portable Control When and Where You Need It

RCT hand-held transmitters provide a convenient and reliable way to control equipment remotely. Our hand-held systems are rugged, easy to use, and available in a variety of configurations to fit your application.

- Short and Long Range Options
- Single or Multi-Switch Models
- Rugged and Reliable
- Ideal for Industrial and Commercial Use
- Custom Configurations Available

Irrigation Control

TRC Irrigation Remotes

Since 1982, Remote Control Technology has been a leader in wireless remote controls for irrigation systems. Our TRC products are designed for easy integration with major irrigation controllers and provide reliable long-range control in the field.

- Compatible with Leading Controllers (Rain Bird, Irritrol, Hit Logic, and more)
- Long Range Performance
- Single and Multi-Station Control
- Rugged, Weather-Resistant Design
- Trusted by Irrigation Professionals

Quality Products. Exceptional Support.

At Remote Control Technology, we are committed to quality and service. With over 40 years of experience, we manufacture and sell rugged, reliable wireless control systems for industrial, municipal, and agricultural applications.



**Proven
Since 1982**



**Rugged
& Reliable**



**Expert
Technical
Support**



**Proudly
Made in the USA**