

Digital
Radios for
Automated
Monitor &
Control of
Equipment
and
Processes



Superior
Range

Superior
Reliability



Plug & Play
Simplicity



RADIO

- 900 MHz, Frequency-Hopping, Spread-Spectrum, Digital Radio...
- Proprietary Communications Protocol...
- Unique Transmitter I.D. Codes...
- and Diversity Reception...

...All Combine to Create a Robust, Reliable, Virtually Interference Immune Wireless Control System

- with No FCC License Required

OPERATIONAL

- Superior Range: 2+ miles (Standard System), 5+ miles (Enhanced System)
- Fully Supervised Operation Including Dedicated Fault Alarm Relay Output
- Long-Life, Lithium Battery Powered Transmitters Ideal for Off-Grid Applications
- 12 VDC-Powered Transmitter Options Available
- Low Power Consumption Ideal for Solar Power

PHYSICAL

- Integrated, Internal Antennas – No Separate Installation Required
- Lightweight, Conduit-Ready, Weatherproof Enclosure
- Quick, Easy Installation

OPTIONS

- SmartRepeater™ Available for Sites with Major Obstacles or Extreme Range
- Compact, Handheld Transmitters Create Push-Button Remote Control for Any Equipment or Process

800 SERIES SPECIFICATIONS

Radio: 902 - 928 MHz; frequency hopping, spread spectrum.

Power Requirements: Fixed Transmitter, line powered: 11 - 14 VDC; 40 mA (Standard) or 110 mA (Enhanced). Fixed Transmitter, battery powered: 3 V, 2/3A lithium battery (Panasonic CR123A, Duracell 123A, or equivalent); 3 - 5 yr typical battery life (Standard) or 1 - 2 yr typical battery life (Enhanced). Handheld Transmitter: 3 V lithium battery (Panasonic CR2 or equivalent); 3 - 5 yr typical battery life. Receiver: 11 - 14 VDC; 180 mA typical, 400 mA maximum. Repeater: 12 - 16.5 VDC or VAC; 100 mA.

Transmitter Input: Handheld: push-button contacts (NO). Fixed, single: 1 set of dry contacts. Fixed, dual: 2 sets of dry contacts. Transmitter circuits: NO or NC or 1 NO / 1 NC (Dual Enhanced).

Typical Range (line of sight): 2+ mi (3+ km) (Standard), 5+ mi (8+ km) (Enhanced), or 2,000+ ft (600+ m) (Handheld). Site environmental conditions unique to each installation including temperature, mounting height, obstructing terrain, foliage, or structures, and local 900 MHz noise may affect achievable range.

Receiver Outputs: SPDT (Form C) relays (0.5 A @ 12 VDC). 1 Fault. Actuation: 1 (RD810), 4 (RD811), or 5 (RD812).

Maximum Transmitters per Receiver: 1 (RD810), 4 (RD811), or 16 (RD812).

Enclosure: Fixed Transmitter/Receiver: Weatherproof, PPG Delfleet® Evolution coated PVC with integrated 1" FNPT fitting. Handheld Transmitter: NEMA 1 molded plastic. Repeater: Weatherproof molded plastic.

Operating Environment: 90 % relative humidity, non-condensing. Fixed Transmitter/Repeater: -4 °F to 140 °F (-20 °C to 60 °C). Handheld Transmitter/Receiver: 32 °F to 140 °F (0 °C to 60 °C).

Weight: Fixed Transmitter: 2.2 lb (1.0 kg). Handheld Transmitter: 2 oz (57 g). Receiver: 2.9 lb (1.4 kg). Repeater: 1.7 lb (770 g).

Dimensions: Fixed Transmitter/Receiver: 4.8 in diam x 10.6 in (122 mm x 270 mm). Handheld Transmitter: 3.0 in x 1.6 in x 1.0 in (77 mm x 41 mm x 26 mm). Repeater: 7 in x 7 in x 3 in (178 mm x 178 mm x 77 mm).