

## 616R SmartSwitch™ Receiver

(16-output, 64-transmitter)

### FEATURES:

*900 MHz Spread Spectrum Digital Reliability*

*Wavelength 70% shorter than 300 MHz provides greater site flexibility.*

*Data Encoding and Proprietary Protocol*

*Quick and Easy Installation*

*No FCC License Required*

**Compatibility:** Compatible with Isaacs 600 and 1200 Series transmitters.

**Output:** 16 single-pole, double-throw actuation relays (1 A @ 120 VAC). 1 single-pole, double-throw fault relay (1 A @ 120 VAC).

**Response:** Instantaneous upon receipt of valid transmission.

**Power Requirements:** 12 – 17 VDC, 800 mA.

**Power Consumption:** 150 mA typical.

**Operation:** Receiver actuation relays provide local output of remote contact(s) monitored by mated Isaacs transmitter(s). LED's and two-digit readout indicate status of each system transmitter and receiver relay. Receiver can respond to up to 64 different Isaacs 600 or 1200 Series transmitters for control of the 16 actuation relays. To the fault relay or to an available actuation relay, receiver can provide communications fault output after reception from any system transmitter has been lost for a specified time period. Receiver also provides fault output, either to fault relay or available actuation relay, when voltage in any system transmitter battery falls below acceptable level. Receiver can respond to individual transmitter(s) monitoring dual parallel contacts. Operating range is dependent on site environmental factors unique to each installation such as ambient temperature, mounting height and its relation to obstructing terrain, foliage, or structures, and local 900 MHz noise level.

**Operating Conditions:** 0 – 95% relative humidity, non-condensing. 32°F to 122°F (0°C to 50°C).

*In undocumented cold chamber testing of signal strength, there was no measurable degradation down to -20°C. Between -20°C and -30°C some degradation in measured signal strength was observed. Between -30°C and -40°C instances of operational failure due to non-fatal hardware failure were observed. By -40°C complete operational failure due to non-fatal hardware failure was observed. Normal operation resumed upon increase in temperature.*

**Programmability:** Actuation relays programmable collectively as latch, follow (except with 614T), or 4 – 16 second momentary. Fault relay programmable separately as latch, follow, or 4 – 16 second momentary. Available periodic status transmission response windows range from 1 minute to 99 hours, or disabled. For systems utilizing individual transmitter(s) monitoring dual parallel contacts: one secondary output programmable separately to any available relay; primary and secondary outputs from individual transmitter(s) combinable in any available



actuation relay. Communications fault output programmable to any available relay. Transmitter battery low voltage output programmable to any available relay.

**Radio:** Narrow band, frequency hopping spread spectrum.

**Frequency Range:** 902 – 928 MHz.

*This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.*

**Enclosure:** NEMA 1 rated molded plastic.

**Dimensions (enclosure):** 8.5 x 11.0 x 1.8 inches (21.6 x 28.0 x 4.5 cm).

**Weight:** 2.2 lb (1.0 kg).



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