

TRIGA

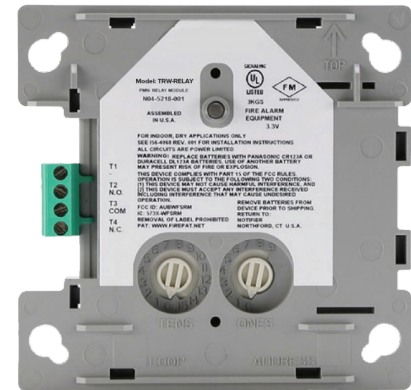
Intelligent Wireless Modules

Triga wireless modules are intelligent addressable modules which provide secure, reliable communication to the Fire Alarm Control Panel (FACP) across a Class A mesh network. Wireless modules create an opportunity for applications where it is costly (concrete walls/ceilings, buried wires), obtrusive (surface mount conduit), or possibly dangerous (asbestos) to use traditional wired devices. In addition, both wired and wireless devices can be present on the same FACP providing an integrated wired-wireless solution for increased installation potential.

The mesh network within the Triga system creates a childparent relationship between the devices so that each device has two parents providing a second path for communications on every device. If one device can no longer operate for any reason, the rest of the devices can still communicate with each other, directly or through one or more intermediate devices.

The Triga system also engages frequency hopping to prevent system interference whether intentional or accidental. The Triga monitor module is intended for use with a wireless gateway to interface with a device having contacts used to signal status conditions. It is designed to provide an interface to contact devices such as security contacts, waterflow switches, or pull stations. The input to the monitor module is non-latching and does not require a reset. The device has a panel controlled LED indicator. The monitor module must be within 3- feet of the monitored device when using field wiring or 20 feet in nonmetallic conduit.

The Triga relay module allows a compatible control panel to switch discrete contacts by code command. The relay contains an isolated set of Form-C contacts, which operate as a SPDT switch. Circuit connections to the relay are not supervised by the module. The Triga relay module can be used to activate functions such as a remote power supply



TRW-RELAY WIRELESS RELAY MODULE

(in conjunction with a monitor module), elevator recall, door holders and fan shutdown of wired devices or Triga devices within the same mesh network. The module also includes a panel-controlled LED indicator.

The devices communicate across the mesh network through a gateway to the FACP. The FACP views the Triga wireless device and another addressable device on the system providing similar detection functions and outputs as a wired counterpart. In addition, both wired and wireless devices can be present on the same FACP to meet the needs of a given application. A Triga wireless system can use any combination of modules, smoke, or heat detectors.

FEATURES & BENEFITS

- Wireless Installation
- Class A mesh network
- Addressable code wheels
- Commercial applications
- Complies with UL Standards for UL 864 and UL 268
- Complies with NFPA 72 Fire Alarm System requirements.
- SWIFT Tools also creates a useful graphic representation of the wireless network. It provides important system data and a visual perspective.
- SWIFT Tools makes the survey and installation faster and easier to complete; diagnostics simpler to understand and view
- Bi-directional communications
- Wireless devices use (4) CR-123A lithium batteries for reliable, long lasting battery life. CR-123A batteries have a UL listed life of 2 years.
- Frequency hopping
- SWIFT integrates with previously installed FACP's for a seamless, easy and cost-effective system addition

Technical Specifications

MONITOR MODULE

Physical Dimensions: Height 4½"; Width 4½"; Depth 1½"

Device Weight (includes 4 batteries): 7.9 oz (224 g)

ENVIRONMENTAL

Operating Temperature Range: Photo: 32°F to

120°F (0°C to 49°C);

Air Velocity: Photo/thermal with Heat: 0 to 4,000

fpm (0 to 20 m/sec)

Humidity: 10 to 93% relative humidity (noncondensing)

ELECTRICAL

Maximum Operating Voltage: 3.3VDC

Average Operating Current: 210µA, 3.9 EOL

Maximum Current Draw: 5 mA (LED on)

EOL Resistance: 3.9K Ohms

Maximum IDC Wiring Resistance: 10 Ohms

Maximum IDC Voltage: 3.2Volts

Maximum Average IDC Current: 5.5µA

Maximum Transmit RF Power: 17dBm

Radio Frequency Range: 902-928 MHz Battery

Life: 2 years

BATTERY SPECIFICATIONS

Battery Type: 4 Panasonic CR123A or 4 Duracell DL 123A

Battery Life: 2 years

Battery Replacement: Upon TROUBLE BATTERY

LOW display and/or during annual maintenance

RELAY MODULE SPECIFICATIONS

PHYSICAL / OPERATING SPECIFICATIONS

Dimensions: Height 4¼"; Width 4¼"; Depth 1½"

Operating Temperature Range: 32°F to 120°F

(0°C to 49°C)

Operating Humidity Range: 10% to 93% noncondensing

ELECTRICAL SPECIFICATIONS

Maximum Operating Voltage: 3.3VDC

Average Operating Current: 210µA

Maximum Current Draw: 5mA (LED on)

Maximum Transmit RF Power: 17dBm

Radio Frequency Range: 902-928MHz Maximum

Transmit RF Power: 17 dBm

Radio Frequency Range: 902-928 MHz

RELAY CONTACT RATINGS

Current Rating	Maximum Voltage	Load Description	Application
2A	25 VAC	PF=0.35	Non-coded
3A	30 VDC	Resistive	Non-coded
2A	30 VDC	Resistive	Coded
0.46A	30 VDC	(L/R = 20 ms)	Non-coded
0.7A	70.7 VAC	PF=0.35	Non-coded
0.9A	125 VDC	Resistive	Non-coded
0.5A	125 VAC	PF=0.75	Non-coded
0.3A	125 VAC	PF = 0.35	Non-coded

This document is not intended to be used for installation purposes. We try to keep our product information up-to date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

ORDERING INFORMATION

TRW-MONITOR: Wireless monitor module for use with the TRW-GI wireless gateway. Includes a special cover with a tamper magnet built in. Recommended for installation in a TR-SMB500-WH box (ordered separately) rather than a metal backbox for best performance. Ships with 4 Panasonic CR123A or 4 Duracell DL123A batteries.

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TRW-GI: Wireless Gateway.

W-USB: Wireless USB radio/antenna dongle that plugs into the USB port of a PC running SWIFT Tools.

TR-SMB500-WH: Optional surface-mount backbox.

AGENCY LISTINGS AND APPROVALS

Each device complies with part 15 of the FCC rules meaning operation is subject to two conditions.

- 1) The device may not cause harmful interference
- 2) The device must accept any interference received including interference that may cause undesired operation.

The listings and approvals below apply to the basic intelligent wireless detectors. In some cases, certain modules may not be listed by certain approval agencies or listing may be in process.

Consult factory for latest listing status.

UL Listed: S2424

FM: approved

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