

# Peripheral and Detection Devices Initiating Devices

## Intelligent Device Interface Modules Model XTRI-D | XTRI-R | XTRI-S



### Architect & Engineer Specifications

- Siemens **ISOTECHNOLOGY™**
  - Provides "True Class – X" operation to NFPA 72 SLC field wiring requirements
  - Supports 252 **ISOTECHNOLOGY** ready devices per loop, and in mixed mode up to 30 devices between isolated devices
- Dual input on Model XTRI-D, via a single address
- Integral single-pole, double-throw (SPDT) relay on Model XTRI-R:
  - Up to 4 Amps.
- Low current draw
- Polarity insensitive (in non-isolation mode) via **SureWire™** technology:
  - Modern technology supports comprehensive system and interface communication
- Multi-color light-emitting diode (LED) indicates system status:
  - GREEN | AMBER | RED
- Mounts in a 4-inch (10.2 cm.) square, 2-1/4" (5.7 cm.) deep single-gang or double-gang back box
- Non-obstructive front-end access to programming port and wiring terminals
- Device Programmer | Test Unit programs and verifies address, as well as tests device functionality
- Restriction of Hazardous Substances (RoHS) compliant
- UL864 | UL2572 | UL2017 Listed; CAN/ULC-S527 & CAN/ULC-S576 Listed
  - File S24304, Vol. 3

### Product Overview

The Siemens – Fire Safety XTRI-series Intelligent Interface Modules are designed to provide the means of interfacing direct shorting devices to the fire-alarm control panel (FACP) SLC. All modules take up one (1) address on the loop.

Each XTRI-series interface module provides the "built-in" **ISOTECHNOLOGY** feature - intelligent dual isolation meeting NFPA 72 Class X (Style 7) wiring requirements. Up to 252 isolators per loop and up to 30 devices between isolators (wired in polarity-insensitive mode). Additionally, the devices between isolators can either be 'H'-series or the more contemporary 'X'-series detection devices.

### Specifications

The Siemens – Fire Safety XTRI-series Intelligent Interface Modules are available in three (3) individual types:

- One (1) Dual-Input: XTRI-D
- Two (2) Single-Inputs: XTRI-R (with relay) | XTRI-S
  - The single-input versions are each designed to monitor a normally open (N.O) or (N.C) normally closed dry contact

XTRI-D | XTRI-R | XTRI-S incorporates **ISOTECHNOLOGY** – the configurable, built-in dual isolator function. Additionally, an XTRI-series interface module supports NFPA 72 Class X (Style 7) survivability requirements for shorts while providing reliable alarm communication to the Siemens FACP. The isolation feature found on the XTRI-series Intelligent Interface Modules gives information as to the location of the fault. When a short occurs, the panel can identify the fault automatically, and the module recognizes the short location (in front of the device or behind the device).

Overall, the built-in isolators improve the diagnostics and location of the problem, including a short.

The modules are configurable by a Siemens compatible FACP (or panels) in an isolator (polarity sensitive) or non-isolator (polarity insensitive) mode. When a XTRI-series interface module is configured as an isolator, that module has the capacity of functioning as both an in/out device, as well as an isolator.

Advanced troubleshooting is provided by compatible panels by identifying when a XTRI-series interface module is configured as an isolator, but is wired incorrectly in a polarity-insensitive mode.

Each Model XTRI-series device has a multi-color LED that flashes when **GREEN** operating in Normal mode; **AMBER** if the unit is in a 'Trouble' condition, and **RED** to indicate a change of status.

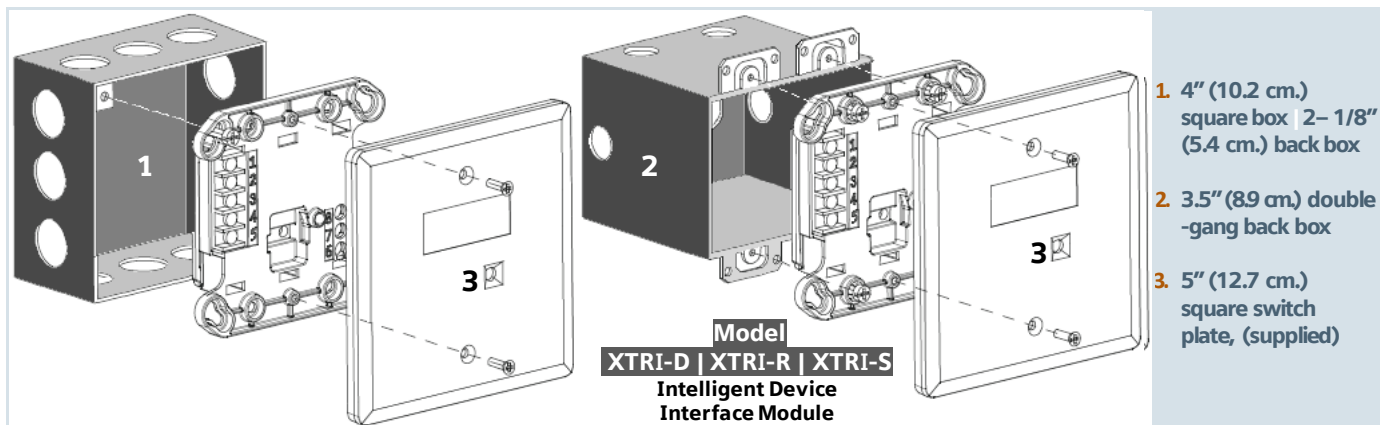
### Model XTRI-S

This single-input interface module can only monitor and report the status of a N.O. or N.C. contact.



**Model**  
**XTRI-D | XTRI-R | XTRI-S**  
**Intelligent Device**  
**Interface Module**





## Specifications – (continued)

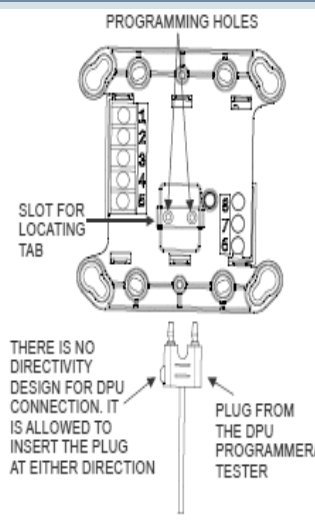
### Model XTRI-R

Through the use of an addressable 'Form C' relay, the Model XTRI-R relay and contact device input are controlled at the same address. The relay and input contact can be controlled as a separate function from a Siemens compatible FACP. The relay is typically used where control or shunting of external equipment is required.

### Model XTRI-D

Model XTRI-D is a dual-input module that is designed to supervise and monitor two (2) sets of dry contacts. Model XTRI-D only requires one (1) address, but responds independently to each input. Model XTRI-D is ideal for monitoring a water-flow switch and its respective valve tamper switch.

## Mounting Data



**NOTES:** Each interface module mounts directly to a user-supplied switchbox. The electrical boxes, seen above, are supplied-by-others (BO).

Models XTRI-D, XTRI-R and XTRI-S mount directly onto a 4-inch (10.2 cm.) square, 2 1/4" (5.7 cm.)-deep box back box, or to a user-supplied double-gang 3 1/2" deep back box.

A 5" (12.7 cm.) square, off-white faceplate is included in each shipment of a Siemens Model XTRI-series module.

## Operation

### Field-Device Programmer / Test Unit

Siemens – Fire Safety innovative technology allows Model XTRI-series intelligent interface modules to be programmed via the Siemens field-device programmer / test unit (Model DPU), which is a compact, portable and menu-driven accessory for electronically programming and testing Siemens peripheral modules and devices promptly and reliably. For instance, the field technician selects the accessory's program mode, and enters the desired address.

Model XTRI-series interface module is connected to Model DPU with the programming cable provided with the tester.

**NOTE:** Since the XTRI-series of interface modules are advanced initiating devices, the latest Model DPU firmware update is required.

Model DPU eliminates the need for cumbersome, unreliable mechanical programming methods (e.g. – dials and rotary switches), and reduces installation and service costs by electronically programming and testing the module prior to installation. When set in 'test' mode, Model DPU will perform a series of diagnostic tests without altering the address or other stored data, allowing technicians to determine if the module is operating properly.

Each field-device programmer / test unit operates on AC power or rechargeable batteries, providing flexibility and convenience in the programming / testing of fire-safety equipment from practically any location. Additionally, with the use of a Model DPU unit, there is no longer a cause for concern with any vibration, corrosion and other deteriorating conditions that could negatively affect any electro-mechanical-addressing mechanism.

## Compatibilities

Siemens 'X' modules may be used along with Model 'H'-series intelligent detectors; Model 'HMS'-series addressable manual stations, or any other 'H'-series addressable intelligent module (e.g. Model HZM or Model HCP). Additionally the X-series modules are compatible with all Desigo and Cerberus Pro detectors and peripherals of the same circuit.

Interspersing 'X' & 'H'-series devices on the same loop is mostly permitted, but there are exceptions: Models HLIM (isolation module) and SBGA-34 (audible base) cannot be used with 'X' devices on the same loop.

## Temperature and Humidity Range

Models XTRI-D | XTRI-R | XTRI-S intelligent interface modules are UL Listed | ULC Listed. Environmental operating conditions for each interface module is 32°F (0°C) to 120°F (49°C) with a relative humidity of no greater than 95%, non-condensing.

### LED Indicators

| FLASH COLOR | CONDITION                                           | FLASH INTERVALS<br>[in seconds] |
|-------------|-----------------------------------------------------|---------------------------------|
| GREEN*:     | Normal supervisory operation                        | 10                              |
| YELLOW:     | Device is in trouble and needs to be replaced       | 4                               |
| RED:        | Locate   'Alarm'                                    | 1                               |
|             | Output Device (XTRI-R only)                         | 10                              |
| NO FLASH:   | Power is not being received / Replacement is needed | –                               |

### Electrical Ratings

|                                      |                              |       |
|--------------------------------------|------------------------------|-------|
| OPERATING VOLTAGE RANGE:             | 13VDC – 32VDC                |       |
| RELATIVE HUMIDITY:                   | 0 – 95%<br>(non-condensing)  |       |
| 'ACTIVE' OR 'STANDBY' CURRENT, MAX.: | 500µA                        |       |
| LINE SIZES AMERICAN WIRE GAUGE (AWG) | 14 AWG, max.<br>18 AWG, min. |       |
| CURRENT DRAW, MAX   AVG.             | XTRI-S                       | 650µA |
|                                      | XTRI-R                       | 750µA |
|                                      | XTRI-D                       | 950µA |
| RELAY RATINGS:<br>(for Model XTRI-R) |                              |       |
| RESISTIVE:                           | 4 Amps   125 VAC             |       |
|                                      | 4 Amps   30 VDC              |       |
| INDUCTIVE:                           | 3.5A, 120 VAC (0.6 pF)       |       |
|                                      | 3.0A, 30 VDC (0.6 pF)        |       |
|                                      | 2.0A, 120 VAC (0.4 pF)       |       |
|                                      | 2.0A, 120 VAC (0.35 pF)      |       |
|                                      | 2.0A, 30 VDC (0.35 pF)       |       |

### Details for Ordering

| MODEL OR TYPE | PART NUMBER  | PRODUCT                             |
|---------------|--------------|-------------------------------------|
| XTRI-S        | S54370-B3-A1 | Single Input Module                 |
| XTRI-R        | S54370-B1-A1 | Single Input Module<br>(with relay) |
| XTRI-D        | S54370-B2-A1 | Dual Input Module                   |
| DPU           | 500-033260   | Device Programmer /<br>Test Unit    |

**NOTE:** Refer to installation manual: P/N – A6V101055479 to ensure Model XTRI-D | XTRI-R | XTRI-S compatibility with the Siemens FACP's intended for use in the given application.

**NOTICE** – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice. The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

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