

Description

Sigcom TRX50 system offers a fully integrated solution for reporting and managing major emergencies:

- **Fire and Security Alarms**
- **Terrorist Activities**
- **Hazardous Chemical Releases**
- **Severe Weather**
- **Any Situation that endangers the occupants of an area or facility.**

The system provides a long-range radio backbone to report emergency incidents to a central dispatch location, and the capability to respond, including initiating prerecorded and live voice messages from the head end back to any remote location. The TRX50 system meets the stringent requirements of municipal fire protection systems and the specific requirements of the U.S. Military for security and force protection applications.

Applications

Applications for TRX50 system include municipal fire alarm networks as well as fire alarm monitoring and wide area mass notification at military facilities, college campuses, oil refineries and production platforms, petrochemical plants, hospital campuses, and manufacturing plants. TRX50 is a modular design giving users and designers the ability to add functionality and to significantly expand the system and the radio network.

The most versatile and reliable emergency communication system for

- **Municipalities**
- **Military Bases**
- **Industrial Sites**
- **Academic Institutions**
- **Any location requiring complete alarm reporting and emergency mass notification**

Features

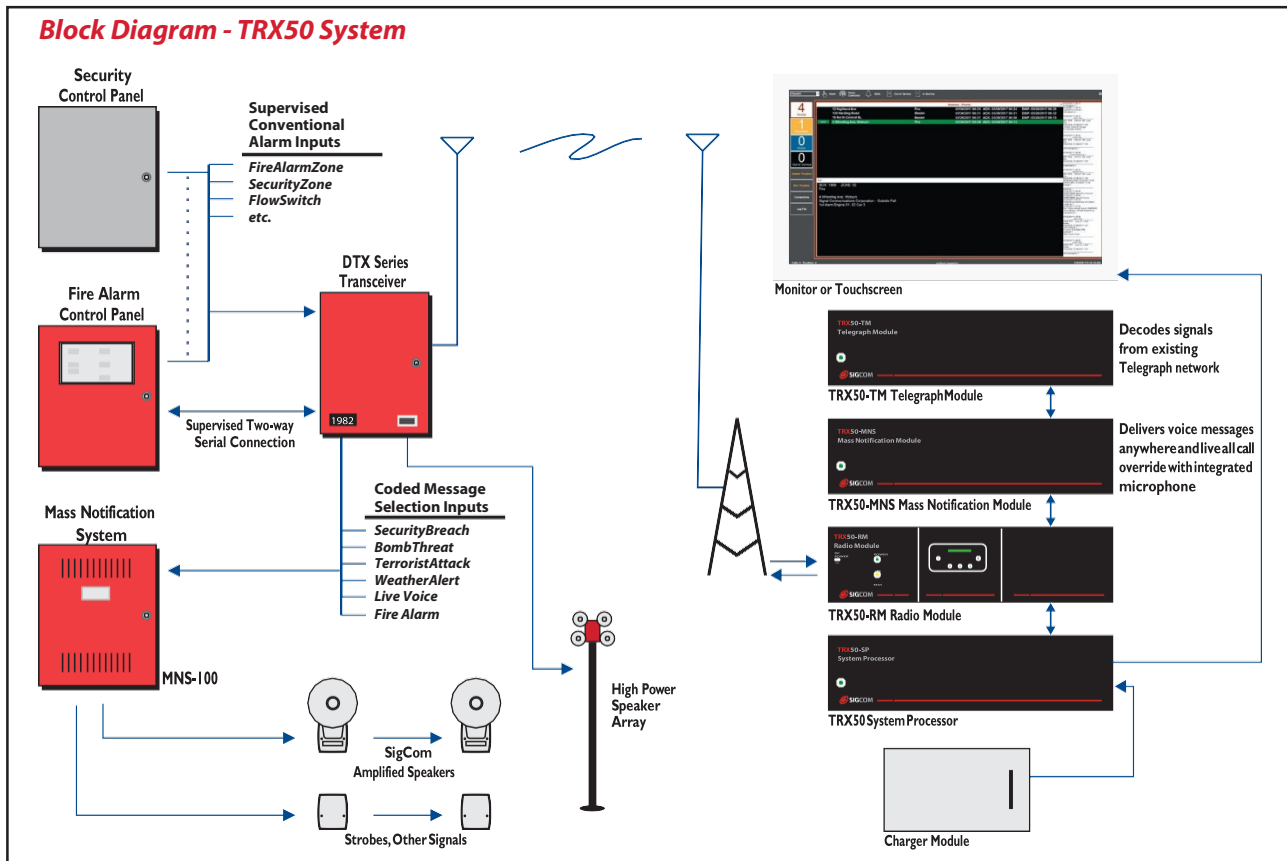
- **Wide area coverage with long range radio transceivers – up to 25 miles – Longer range applications with repeaters**
- **Modular design supports both one way and two-way radio communication with full command & control**
- **Supports voice over radio network with Mass Notification System option**
- **Integrates legacy hardwire municipal networks enabling transition to long range radio**
- **Powerful Integrated platform saves room in the dispatch center**

Benefits

- **Sigcom’s private long-range radio is the most stable and reliable emergency and alarm communication technology – no risk of technology sunset**
- **Ideal for fast and cost-effective deployment of new alarm and emergency reporting networks**
- **Enables cost effective managed transition for existing Telegraph and other aging hardwire networks to modern long-range radio**
- **Approved for BOTH Public and Proprietary Alarm Reporting Systems (NFPA 72 - Chapters 26 and 27)**
- **Easy deployment of wide area Mass Notification Systems for communicating live and pre-recorded voice messages**
- **Supports full remote command and control functions through the head end software to any radio location – turn anything on and off manually or automatically**

Operation

Signals are received from fire alarm panels, security alarm panels, gas or radiation monitoring sensors, or manual activating devices by Sigcom DTX long range radio alarm transceivers and communicated back to the TRX50 over the radio system. Signals can also be communicated to TRX50 from existing hardwire methods such as municipal Telegraph systems. The TRX50 System Processor receives the signals and produces a visual and audible indication on a monitor or touchscreen that there is an incident or alarm. The dispatch center operator can see information pertaining to the event and respond. Command signals can be sent back to the radio transceivers. These commands can be manually activated by the operator or configured to activate automatically and can trip pre-recorded or live voice messages and/or tones, activate lights and strobes, initiate message signs, shut down HVAC or other critical systems, and more.



TRX50 System Components

System Processor – TRX50-SP Series

The System Processor is a rack mount module that is the central component for the system for operation and configuration. The intuitive user interface is a display, keyboard, and mouse. Additional modules, such as the Radio Module, connect directly to the System Processor. The System Processor also contains the power distribution for all system components and provides automatic switch over to a Charger Module in the event of an AC power outage.

Charger Module – TRX50-CM Series

The Charger Module is a rackmount or wall-mount power source that serves as the uninterruptible power supply (UPS) for the system. The Charger Module includes the battery backup supply along with all circuitry and components necessary to re-charge the batteries. The Charger Module and the battery size depend on the backup power requirements of each installation. The batteries with the Charger Module will have capability to provide 24 hours standby power to the system.

TRX50 System Components (cont.)



Radio Module – TRX50-RM Series

The Radio Module is a rack mount module that can be configured for the individual application based on requirements for the radio network - one-way supervised reporting, two-way command and control, or two-way command and control with Mass Notification System functionality. An integral radio receiver in the Radio Module is designed to operate in the 72-76 MHz or 135-175 MHz bands. This receiver meets FCC Part 15 and is narrow band compliant. The Radio Module transmits frequency modulated (FM), Frequency Shift Keyed (FSK) encoded radio signals that are compatible with the System Processor.

Remote Dispatch Stations – TRX50-RDS Series

The System Processor can support up to 5 remote dispatch stations in the same physical building as the System Processor to allow multiple operators to respond to and manage system events. Each Remote Dispatch Station includes the same intuitive user interface with monitor, keyboard, and mouse.

Telegraphic Module – TRX50-TM Series

The Telegraphic Module provides connections to legacy municipal hardwired systems through Form 4 decoders and allows seamless integration with the new radio system so all alarms and incidents can be reported and responded to by a single user interface display. The Telegraphic Module is connected to the System Processor.

Mass Notification Module – TRX50-MNS Series

The Mass Notification Module is a rack mount module that provides the essential elements of a Mass Notification System. It delivers live voice anywhere and provides centralized control of pre-recorded messages stored in MNS panels installed in buildings. The module includes 2 live microphones. One is directly attached to the MNS module and serves as an 'All Call' microphone. The other is the primary microphone that is provided at the operator console and can be user selected to page into a specific building.

Specifications

System Processor

Power Supply:	110/240 VAC, 50/60 Hz 0.97 Amps @ 115 VAC, Nominal
Operating Voltage:	24 Volts, nominal
Standby Current:	0.85 Amps @ 24 VDC
Back-Up Battery Size:	24V, 26 AH (24 Hour Back-Up)
Maximum Number of Boxes:	500/ Frequency per NFPA, expandable to 2 frequencies
Radio Decoding Channels:	2
Operating Temperature:	32° to 125°F
Dimensions:	
Rack Mount:	5.22”h (3U) x 14”d, 19” EIA Rack
Desktop:	11.75”h x 19.75”w x 18”d
Weight:	
Rack Mount:	13 lbs
Desktop:	40 lbs

Radio Module

Operating Voltage:	24 VDC nominal (from System Processor or External Source)
Power Consumption:	0.25 Amps (max.) @ 24 VDC
Frequency Range:	72-76 MHz 138-170 MHz
Modulation:	FM
Narrowband Compliant:	Yes
Number of Channels:	1 Standard, 2 max.
Operating Temperature:	32° to 125°F
Dimensions:	
Rack Mount:	5.22”h (3U) x 12”d, 19” EIA Rack
Desktop:	Can fit in with System Processor in a case with dimensions 11.75”h x 19.75”w x 18”d
Weight:	15 lbs (max.)

Mass Notification System Module

Operating Voltage:	24 VDC Nominal (from System Processor or External Source)
Power Consumption:	
Idle Mode:	20 mA @ 24 VDC
I WTx:	270 mA @ 24 VDC
Number of Channels:	1 Transmitter
Operating Temperature:	32° to 125°F
Dimensions:	5.22”h (3U) x 12”d, 19” EIA Rack
Weight:	7.5 lbs

Charger Module

Power Supply:	100-240 VAC, 50/60 Hz
Power Consumption:	1.5 Amps (max.) @ 110 VAC
Operating Voltage:	28 VDC nominal
Operating Temperature:	32° to 125°F
Dimensions:	
Rack Mount:	10.47”h (6U) x 5.62”d, 19” EIA Rack
Wall Mount:	10.47”h (6U) x 5.62”d x 19”w
Weight:	7.5 lbs

Telegraphic Module

Power Supply:	24 VDC nominal 100 mA @ 24 VDC
Operating Temperature:	32° to 125° F
Input:	15 optically isolated coded dry contact inputs
Output:	6 coded re-transmission outputs
Dimensions:	5.25”H x 19”W Rack mountable; 1.5” depth



Listing

Tested by Factory Mutual

NFPA Chapter 26
NFPA Chapter 27



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