

Radio Alarm Reporting Systems: About SigCom, NFPA, and FM

Sigcom's TRX50, DTX, and other Radio Alarm Reporting Systems are tested and approved by Factory Mutual "FM" to the standards set by the National Fire Protection Association (NFPA) code that covers Public and Commercial Alarm Reporting Systems.

- **National Fire Protection Association, NFPA**

NFPA writes the Standards for Fire Alarm Reporting Systems.

- **Factory Mutual, FM**

Factory Mutual is a Nationally Recognized Testing Laboratory, as designated by the Occupational Safety and Health Administration (OSHA). FM writes test procedures to assess and approves Fire Alarm Reporting Systems to the NFPA Standards. FM is equivalent to UL, ETL and other laboratories recognized by OSHA. See <https://www.osha.gov/dts/otpca/nrtl/nrtlist.html>.

- **Signal Communications Corporation (Sigcom)**

Sigcom develops and manufactures life safety systems designed to meet and exceed the standards set by NFPA and other organizations. Sigcom products are tested and approved by Nationally Recognized Testing Laboratories including FM, UL, and ETL.

NFPA Chapter 27, Public Emergency Alarm Reporting Systems

Sigcom systems are listed under NFPA Chapter 27. This covers Public / Municipal alarm reporting systems. Chapter 27 is the most rigorous standard for these systems. For example, Chapter 27 requires operation a wide range of temperature from -40° to +140°F and outdoor uses.

[Excerpts from the Website]

27.1.1 The provisions of this chapter apply to the proper configuration, performance, installation, and operation of public emergency alarm reporting systems and auxiliary alarm systems. Public emergency alarm reporting systems shall consist of alarm boxes and alarm processing equipment that communicate on a wired or wireless network(s), one-way or two-way, meeting the requirements of this chapter. This shall include systems that use a communications infrastructure that is publicly owned, operated, and controlled or where public emergency alarm reporting systems and equipment are used in other applications. [ROP-485]

27.1.2 The installation and use of public emergency alarm reporting systems and auxiliary alarm systems shall comply with the requirements of this chapter.

27.1.3 The requirements of this chapter shall apply to systems and equipment for the transmission and reception of alarm and other emergency signals, including those from auxiliary alarm systems,

NFPA Chapter 26, Supervising Station Alarm Systems / Remote Station Signaling Systems

Sigcom equipment is also listed under NFPA Chapter 26. This covers non-public / commercial operations. Chapter 26 is a less rigorous standard.

The TRX50 is one of very few systems to be compliant with *both* NFPA Chapters 27 and 26.

From the Factory Mutual "FM" Website

Company Search Results for: **SIGNAL COMMUNICATIONS CORP** .

 **Fire Protection**

Signal Communications Corp Div Gulf Industries Inc
4 Wheeling Ave, Woburn, Massachusetts 01801, USA

Electrical Signaling Signaling Systems (Fire) **Proprietary Signaling Systems**

Product		Listing Country	Certification Type
Coded Radio Proprietary System		United States of America	FM Approved
The DTX System for Fire Alarm Reporting	GREEN	United States of America	FM Approved
The TRX-50 System		United States of America	FM Approved

Signal Communications Corp Div Gulf Industries Inc
4 Wheeling Ave, Woburn, Massachusetts 01801, USA

Electrical Signaling Signaling Systems (Fire) **Public Fire Alarm Reporting Systems**

Product		Listing Country	Certification Type
Coded Radio Public Reporting System. System utilizes redundant Vision 21 Processors		United States of America	FM Approved
DTX System for Fire Alarm Reporting	GREEN	United States of America	FM Approved
The TRX-50 System		United States of America	FM Approved

Signal Communications Corp Div Gulf Industries Inc
4 Wheeling Ave, Woburn, Massachusetts 01801, USA

Electrical Signaling Signaling Systems (Fire) **Remote Station Signaling Systems**

Product	Listing Country	Certification Type
The TRX-50 System	United States of America	FM Approved

Continues >

FM Categories of Testing for Sigcom Alarm Reporting Systems

Content downloaded from FMGlobal.com

Public Fire Alarm Reporting Systems (under Electrical Signaling) Testing to NFPA 72 Chapter 27 Requirements

This signaling equipment transmits fire alarms and other emergency calls to the municipal fire headquarters from the public. The municipality controls the installation, use and maintenance of the system, as well as alarm retransmission (to fire stations) if that is necessary. Equipment identifies and automatically records each signal.

Products identified with the **GREEN** symbol have attributes that are considered to be “sustainable” by certain outside organizations. FM Approvals verifies the presence of these attributes. Specific attributes for specific products are listed in the individual listings. To facilitate a search for these products in the Approval Guide, first search by the product type you desire and then refine your search to products with the **GREEN** symbol.

Remote Station Signaling Systems (under Electrical Signaling) Testing to NFPA 72 Chapter 26 Requirements

An Approved remote station signaling system consists of a local alarm system, with a secondary power supply having sufficient capacity to operate the system for 24 hours under maximum normal load, connected to a constantly attended location such as a public fire station. It is essential that there be complete cooperation between the protected property and the remote station personnel; otherwise, substandard service may result regardless of equipment performance.

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FM Reports from Testing for Sigcom Alarm Reporting Systems

Content downloaded from FMGlobal.com

The Sigcom TRX-50 System

The TRX50 system consists of the TRX50-SP System Processor module, the TRX50-RM Radio Module, the TRX50-MNS Mass Notification Module, the TRX50-TM Telegraph Module, and the TRX50-CM Charger Module. TRX50-SP Client stations connect to a TRX50-SP System Processor in a network configuration. The TRX50-SP hardware includes an industrial grade computer with a windows embedded operating system, a power supply system which includes DC/DC regulators, and I/O board, and all the necessary interconnecting cables. Each module, except the Charger Module, is supplied in a 3U rack mountable enclosure or can also be fitted into a desktop cabinet.

The TRX50-SP System Processor interfaces with the DTX Decoder module to receive, decode, and process one-way and two-way DTX series radio fire alarm boxes. It also interfaces with the Vision 21SP System Processor and V21RM Radio Module for processing 8MTJA-16 series radio boxes. The TRX50-SP System Processor also interfaces with the TRX50-TM 15 circuit telegraphic decoder which allows displaying and processing of telegraphic boxes. The TRX50-SP connects to the TRX50-CM Charger Module/Battery for its secondary backup power. The Backup power supports the operation of the TRX50 system for a period of up to 24 hours.

The TRX50-MNS option allows the system to activate a radio transmitter to transmit live or prerecorded voice messages to designated buildings in an installation and to activate messages stored at the remote locations. The TRX50-MNS module hardware consists of a radio voice transmitter, antenna, interface card, and local microphone.

Company Name:	Signal Communications Corp Div Gulf Industries Inc
Company Address:	4 Wheeling Ave, Woburn, Massachusetts 01801, USA
Company Website:	http://sigcom.com
New/Updated Product Listing:	No
Listing Country:	United States of America
Certification Type:	FM Approved

DTX System for Fire Alarm Reporting

The DTX System for Fire Alarm Reporting uses DTX-XXXX-XXXX indoor and outdoor transmitters which are equipped for two independent means of communications: radio and fiber optics (see Manual for list of part numbers). A Fiber Optic Interface Module is located between the transmitter network and the Vision 21 System Processor. The TRX50 interfaces with the DTX to decode and process one-way and two-way DTX alarm boxes. Includes DTX Programmer Software, Version 1.2.01. The transmitter boxes monitor four or sixteen initiating device circuits for alarm and trouble conditions. The transmitters are powered by 120 V ac and by 12 V dc batteries rated at 7.2 AH which provide at least 72 hours of standby power. The DTX Solar transmitter powered by a solar panel model 290-0838-18 replacing the 120 Vac, and a larger 12 Vdc 26 Ah battery providing up to 15 days of power without input from the solar panel communicates with a Vision 21 with software 2.13L. The transmitters use the same enclosures as described above, and operating temperatures are also the same.

GREEN - This product is powered by solar energy.

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New/Updated Product Listing:	No
Green Product:	Yes
Listing Country:	United States of America
Certification Type:	FM Approved

