



# Addressable Fire Alarm System

The Intelligent Solution

Leading innovative technology  
Safeguarding lives and properties

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## Parent company UTC

Headquartered in Hartford, Connecticut, USA, GST's parent company United Technologies Corporation (UTC) is a global corporation made up of business with rich histories of technological pioneering. UTC conducts business in approximately 180 countries, supplying a broad range of high-technology products and support services to building systems and aerospace industries in the world.

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## Gulf Security Technology Co., Ltd. (GST)

Gulf Security Technology Co., Ltd, GST, is a key player in China's fire and security industry and a trusted provider of comprehensive fire system solutions around the world. It is a subsidiary of UTC—United Technologies Corporation—a high-tech innovator in the building solutions and aerospace industries with wide global reach. GST provides a wide range of fire products and customized fire system solutions tailored to the needs of different industries. With a sales infrastructure that covers many countries and regions, and includes a China-wide network of more than 130 sales offices and several logistics centers, GST has become an important part of UTC's global business. To satisfy the needs of its global customer base,

GST has established extensive R&D facilities in Beijing and Qinhuangdao in northern China. It constantly strives to develop innovative new technologies and products.

GST's factory in Qinhuangdao is a large manufacturing base producing intelligent electronic products that incorporate innovative technology. To ensure superior product quality, it has advanced manufacturing and inspection equipment and strong capabilities in quality control and process management.

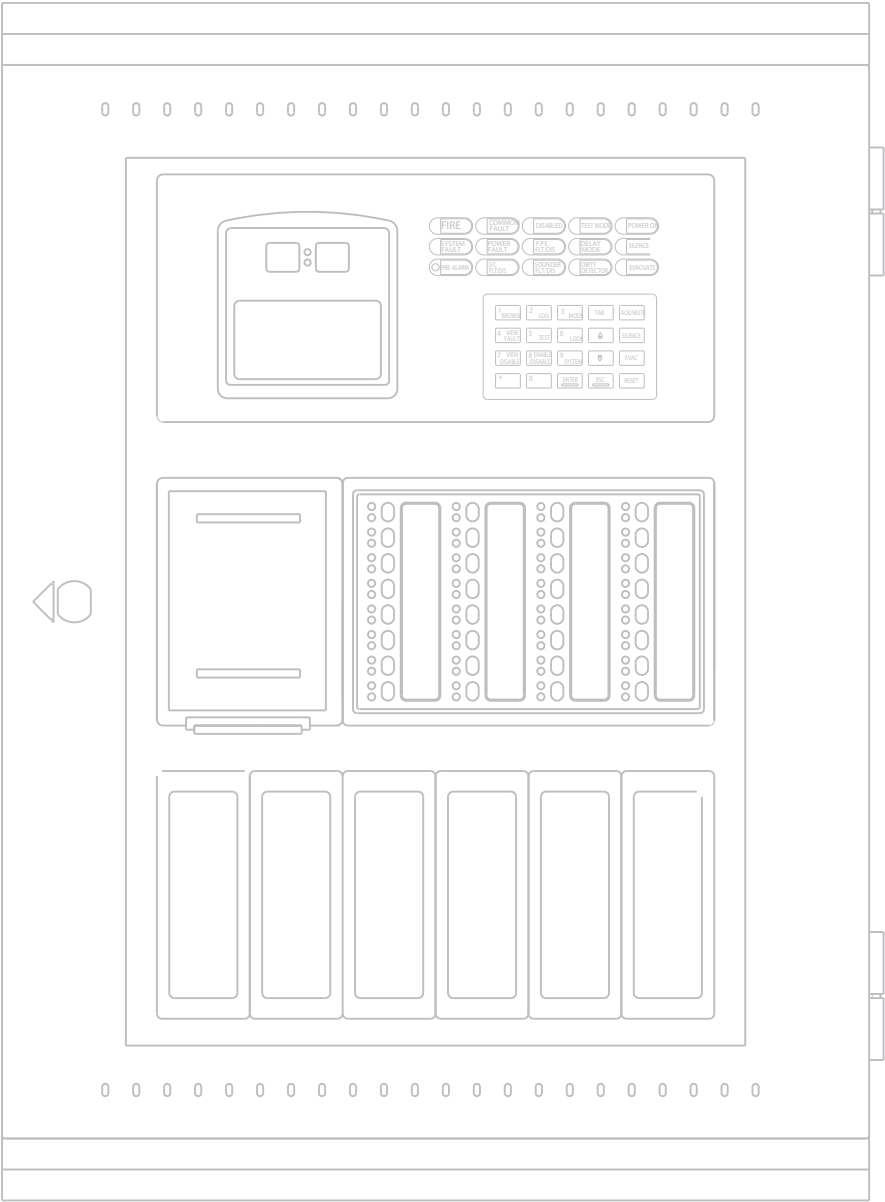
GST has earned a range of national and international certificates of conformity to standards such as China's CCCF, the international UL, the global LPCB, Europe's CE, etc.





# EN54 Addressable Products

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## GST200N

### Intelligent Fire Alarm Control Panel

#### Overview

GST200N Intelligent Fire Alarm Control Panel includes GST200N-1, and GST200N-2. GST200N-1 is single loop panel, possible to be expanded the 2-loop version GST200N-2. They are suitable for small buildings like office, restaurant, store, shop, etc., provide simple installation, operation, and easy maintenance.

#### Features

- Wide range power supply, 100-240VAC, 50-60Hz
- Max. 30 zones. Each zone has its own alarm and fault/disable indicator and a label
- Capacity 235 addressable devices
- Optional expanded to 2 loops, 477 loop devices
- Compatible with GST intelligent and digital products
- 8X18 characters LCD screen
- Non-Volatile memory ensures the data does not loss even if power supply is accidentally removed

#### Models

Model number	Description
GST200N-1	Single loop, English
GST200N-2	Dual loops, English
GST200N-HU	Single loop, Hungarian
GST200N-PT	Single loop, Portuguese
GST200N-SP	Single loop, Spanish
GST200N-IT	Single loop, Italian
GST200N-FR	Single loop, French
GST200N-TK	Single loop, Turkish
GST200N-RO	Single loop, Romanian

LC200

Loop Card For additional 2<sup>nd</sup> loop



P-9905

USB Printer Interface



P-9930

RS232 card for PC connection



P-9960

CAN Class B Network Card



P-9930ModBus

ModBus Card for 3<sup>rd</sup> party interfacing



P-9960A

CAN Class A Network Card



P-9930TCPIP

TCP/IP Network Card



P-9901A

Panel Printer





## GST-NRP00

### Network Repeater Panel

#### Overview

GST-NRP00 Network Repeater Panel is based on GST network technology, providing remote control and indication of the fire alarm system.

#### Features

- Provide remote display and control of system
- Password protected access levels
- 8X18 characters LCD screen
- 15 LEDs to display important information
- Functional control of network panels
- Network-wide operation: Acknowledge, Silence, Reset
- Flush-mount or surface-mount structure
- Meet network protocol by selecting suitable network card

### P-9960

CAN Class B Network Card



### P-9960A

CAN Class A Network Card



## GST852RP

### LCD Repeater Panel

#### Overview

GST-852RP repeater panel is a remote indication unit of GST addressable system. In case of fire, the repeater panel will display the fire type, time and location details together with sound for local notification. This addressable repeater is possible to be connected with GST addressable panels through RS485 links.

#### Features

- Big size LCD display with backlight
- Compatible with all GST intelligent panels
- Mute and lamp test
- Electrically addressing



## GST8903

### Intelligent Graphic Repeater Panel

#### Overview

GST8903 graphic repeater panel (MIMIC panel) is a remote indication unit of GST addressable system. In case of fire or fault, the repeater panel will show the message by specified LED in certain position of the layout drawing, indicating the exact location clearly. This addressable repeater is possible to be connected with GST addressable panels through RS485 links.

#### Features

- Up to 100 LED indication points
- Local buzzer alarm and mute
- Custom Graphical layout to project requirement
- Programmable to display zones or individual device
- Programmable to indicate Fire, action and Fault conditions
- A3, A2, A1 and A0 sizes







## DI-9101E

### Intelligent Combination Heat Photoelectric Smoke Detector

The multi-sensor combines both smoke and heat detections to build fast and reliable performance. 2 smoke sensitivity levels can be set. Heat detection is based on both FT & RR.



## DI-9102E

### Intelligent Photoelectric Smoke Detector

The optical detector is designed based on light scattering technology with high performance chamber, suitable for detecting slow burning or smoldering fires. 2 sensitivity levels can be set.



## DI-9103E

### Intelligent Rate of Rise and Fixed Temperature Heat Detector

The dual heat detector can provide FT & RR fire alarm by analyzing the temperature status by semiconductor heat sensor. 3 detection classes can be set A1R, A2S & BS.

## Overview

DI-91xxE series intelligent detectors adopt the latest digital loop protocol, compatible with GST intelligent fire alarm control panels. With digital communication, the detectors can raise fast alarm signal within 1 second, and much more control can be processed.

The detectors can be installed onto the common detector base DB-01. A remote indicator C-9314P can be connected to each detector.

## Features

- Electrically addressed, can be modified by programmer
- Strong environmental adaptability due to drift compensation
- Self-diagnostic
- Reed switch test
- Fire LED allows 360° viewing
- LED indication for normal status can be turned off by handheld programmer

## C-9314P

Remote Indicator



## DB-01

Common Detector Base





## I-9104

### Intelligent Ultraviolet Flame Detector

#### Overview

I-9104 Intelligent Ultraviolet Flame Detector detects fire by analyzing ultraviolet radiation of flame. It's applicable to places where open fire, fire with intense flame radiation and fire without smoldering stage take place easily, as well as places where quick response to a fire is required. Used together with other detectors, it can alarm fire in time to minimize losses as much as possible. The detectors can be installed onto the common detector base DZ-03.

#### Features

- High sensitivity, reliable performance, dust-proof, damp-proof and corrosion-proof
- Three sensitivity levels
- Electronically addressed in field
- Built-in microprocessor stores 14 history data
- Self-diagnostic

## DZ-03

Common Detector  
Base



## DZ-03T

Thick Detector Base





## I-9105R

### Intelligent Reflective Beam Detector

#### Overview

I-9105R Intelligent Reflective Beam detector is addressable reflective infrared beam smoke detector that can be used as Addressable or Conventional. With excellent built-in microprocessor, the detector can carry out system adjustment, drift compensation of ambient data, and judgment of fire and fault through fixed algorithm. The sensitivity of the detector can be set through hand held programmer in field, to suit different application conditions. The detector is suitable to historical buildings, warehouses, large storages, shopping malls, leisure centers, exhibition halls, hotel lobbies, printing houses, clothing factories, museums and prisons.

4 reflector plates are provided in same package. Usually 1 piece is enough for distance less than 40 meters, and 4 pieces are prepared for long distance up to 100 meters

#### Features

- Wide operating voltage range, large monitoring areas
- Combination of the emitting and receiving part makes mounting easy and optical pathway accurate
- Built-in microprocessor enables intelligent judgment about fire alarm and fault
- The detector can calibrate easily, which ensures a single person complete adjustment in short time. It's also convenient to operate
- Self-diagnostic function can monitor the internal fault
- Drift compensation for factors changing, such as a certain of dust accumulation, positional excursion and ageing transmitter
- Electronically addressed by programmer
- Two sensitivity levels can be set in field
- Attractive and decent appearance

## RP-9105

### Reflector Plate





## DI-9204E

### Digital Manual Call Point

#### Overview

DI-9204E digital manual call point adopts the latest digital loop protocol, compatible with GST intelligent fire alarm control panels. The manual call point is semi-flush mount type. A back box is supplied for surface mounting.

#### Features

- Re-settable (non-breaking glass) via special key
- Dual activation indication
- Electronically addressed
- Friendly installation and test
- Wiring before termination



## D-92WPB

### Water Proof Box

#### Overview

D-92WPB Weather Proof Box is for application of manual call point outdoor installation to provide weather proofing. And the weather proof box is able to protect the manual call point from unwanted activation. Furthermore, it is also an effective guard against physical damage. Internal space is designed to suit most types of European style MCP.

#### Features

- IP65 cover offers fully protection of manual call point
- Meets the requirement of '2 step operation'
- Clear and durable PC cover
- Surface mounting enables the installation easily
- 60mm hole distance and enough internal space to suit most types of European style MCP
- Reserved place for additional micro-switch, battery, buzzer, etc



## D-92FC

### Flip Cover

#### Overview

The D-92FC protective flip cover is installed with D series manual call point, to build a double action of the MCP, prevent from accident trigger operation.

#### Features

- Material: PMMA
- Dimension: 87 X 92 X 20 (mm)
- Thickness: 1.7mm

## I-9300

### Addressable Single Input Module

The I-9300 input module is loop powered, for receiving normally-open or normally-closed contact signal. For normally-open signal, the input cable can be monitored with EOLR.



## I-9319

### Addressable Zone Monitor Module

The I-9319 monitor module is designed to connect conventional detectors into addressable system, powered by external 24VDC. Maximum 25 conventional detectors can be connected to in each zone.

It is also useful to monitor equipment status with both active and fault signals



## I-9301

### Addressable Single Output Module

The I-9301 output module is suitable to drive conventional notification devices or other power required equipment in 4-wire mode by external 24VDC power supplying, and also possible to provide dry contact output in loop powered mode. Maximum 1A output current can be controlled in 4-wire mode.





### I-9300S

#### Addressable Input Interface

Loop powered addressable input interface, designed to monitor dry contact signal.



### I-9301S

#### Addressable Output Interface

Provides 24VDC active output to drive fire-fighting or fire notification devices. External power supply is required.

#### Overview

Mini modules that can be fitted into back box, suitable for interfacing with non-addressable device.

#### Features

- Small size, suitable to be installed in back box
- Cable monitored for open circuit and short circuit
- The address and working mode can be modified in field through the programmer
- Built-in microprocessor processes messages intelligently



### I-9303

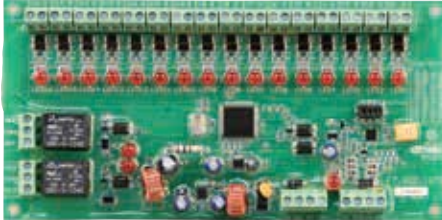
#### Addressable Dual I/O Module

#### Overview

The I-9303 module occupies two addresses, each address can be controlled independently, energizes the relative relay and light the indicator. Each address corresponds to one input. After receiving feedback signal from controlled equipment, the module transmits feedback message to FACP.

#### Features

- Built-in microprocessor processes messages intelligently
- Providing two input channels, working mode can be set normally open and normally closed through handhold programmer
- Occupying two consecutive addresses, can be modified through a programmer
- Plug-in structure



## DI-9309

### Addressable Multi-Channel Interface

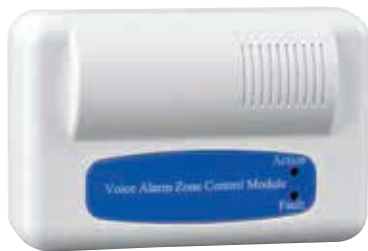
#### Overview

An integrated solution for application of multi-input signals, saving mounting space and installation cost.

Each output channel occupies an individual address and receives start command from FACP, energizes the related relay, gives dry contact output. Each input is corresponded to one address to receive the state signal and transmit it to FACP. The quantity of channels can be set by jumpers.

#### Features

- Max. 16 channels of independent inputs. The quantity can be set as required
- Two channels of independent dry contact outputs
- 3-18 consecutive addresses, changing with selected channel quantity
- Power supply monitored
- Cable monitored for open circuit and short circuit



## I-9305

### Voice Alarm Zone Control Module

#### Overview

The I-9305 Voice Alarm Zone Control Module is designed to switch on/off the voice alarm broadcasting. The module is possible to monitor the power supply, output circuit, report fault in case of abnormal condition.

Set as auto feedback mode, the module can transmit feedback signal automatically to the control panel after switching to fire alarm broadcasting.

#### Features

- Input signals: 75VDC, 100VDC VA signal or 24VDC power
- Connect input port (XF+, XF-) with output port (SP+, SP-) when receiving start signal from the control panel
- Electrically addressed, can be programmed on site by handheld programmer
- Loop-powered
- Output circuit monitored. Report fault message when the output circuit is short or broken
- Plug-in structure

## EN54 Addressable Products



### I-9403

#### Intelligent Sounder Strobe

16 programmable tones with normal/low power consumption mode, powered by loop or external 24VDC source.

Strobe provided by high intensity LED cluster

It also can be programmed works in Light or sound and Light +sound



### I-9404

#### Intelligent Sounder

16 programmable tones with normal/low power consumption mode, powered by loop or external 24VDC source.



#### Overview

I-9403 Intelligent Sounder Strobe and I-9404 Intelligent Sounder are addressable notification devices, can be controlled directly by loop command following preprogrammed equations. The sounder strobe provides pre-alarm/alarm sound together with flashing high-light LED, while the sounder provides sound only.

#### Features

- Electrically addressed, can be modified by programmer
- Two parts construction with base mounted termination allows easy installation
- 16 programmable alarm tones
- Optional Evacuate + Alert mode
- Optional loop powered or external 24VDC powering
- Optional power saving mode or normal mode

## EN54 Addressable Products

#### Overview

I-93xx series modules adopt the latest digital loop protocol, compatible with GST intelligent fire alarm control panels, to interface with conventional or non-addressable equipment.

The working mode of input module can be changed by hand hold programmer. It is suitable for connecting Flow Switch, Zonal Valve, Fire Pump, and etc.

The zone monitor module has a wide range of active threshold, to suit most conventional detectors and manual call points.

The working mode of output module can be changed by hand hold programmer. The dry contact output mode is suitable for controlling Elevator, Fire Door, etc or interfacing to 3<sup>rd</sup> party system. The power output is suitable to drive conventional notification devices.

The modules are surface mount type with bottom cable entry. A back box B-9310 should be used for surface cabling.

- Electrically addressed, can be modified by programmer
- Self-diagnostic
- LEDs for fault and active indication
- Two part plug-in construction with base mounted termination allows easy installation and connection
- Intelligent interface can be addressed and plugged in to base at time of commissioning





### I-9402

#### Addressable Base Mount Sounder

#### Overview

I-9402 addressable base mount sounder takes place of standard detector base, to save space and installation cost, suitable for bedroom and meeting rooms.

#### Features

- Electrically addressed, can be modified by programmer
- Take place of standard detector base DZ-03
- 4 working mode to meet various requirements



### I-9405

#### Addressable Sounder Base

16 programmable tones, powered by loop. Share 1 address with detector in 2-address mode, or individual control in single address mode



### I-9406

#### Addressable Flashing Beacon Base

16 programmable tones, powered by loop. Share 1 address with detector in 2-address mode, or individual control in single-address / double-address mode  
Flash light provided by high intensity LED

#### Overview

I-9405 Addressable Sounder Base and I-9406 Addressable Flashing Beacon Base are addressable notification devices, can be controlled directly by loop command following preprogrammed equations.  
The sounder bases are "sandwich" type, can be easily inserted between the standard base DZ-03 and detector.

#### Features

- Electrically addressed, can be modified by programmer
- Three programmable modes
- 16 selectable tones
- Sandwich structure for easy installation. No additional cable required



### DI-9405

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#### Addressable Sounder Base

16 programmable tones, powered by loop. Share 1 address with detector in 2-address mode, or individual control in single-address / double-address mode



### DI-9406

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#### Addressable Flashing Beacon Base

16 programmable tones, powered by loop. Share 1 address with detector in 2-address mode, or individual control in single-address / double-address mode  
Flash light provided by high intensity LED

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### Overview

DI-9405 Addressable Sounder Base and DI-9406 Addressable Flashing Beacon Base are addressable notification devices, can be controlled directly by loop command following preprogrammed equations.  
The sounder bases are "sandwich" type, can be easily inserted between the standard base DB-01 and detector.

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### Features

- Electrically addressed, can be modified by programmer
- Three programmable modes
- 16 selectable tones
- Sandwich structure for easy installation. No additional cable required



## C-9503E

### Loop Isolator

#### Overview

C-9503E Loop Isolator is the protection facility for addressable loop, can isolate the shorted circuit from the complete loop to ensure normal operation of other parts and locate the isolated part. The isolator is applicable to all kinds of loop fire alarm systems, suitable for Class A and Class B.

#### Features

- Polarity-sensitive external connections. Input and output can be used inversely without direction
- Delayed power-up to output end devices, avoids strong transient current when the load is heavy
- Plug-in structure



## DC-9504E

### Base Mount Isolator

Isolator base to replace DB-01 common base, compatible with DI series detectors

#### Overview

The isolator base provides simple application method to save the installation space and cost.

#### Features

- Polarity-sensitive external connections. Input and output can be used inversely without direction
- Delayed power-up to output end devices, avoids strong transient current when the load is heavy



## C-9504E

### Base Mount Short Circuit Isolator

Isolator base to replace DZ-03 common base, compatible with I series detectors

### P-9910B

#### Hand Held Programmer

#### Overview

In GST intelligent system, all addressable devices are electronically addressed. P-9910B Hand Held Programmer is the tool for programming. It can also be used to read the parameters and set the working mode of those devices.

#### Features

- Hand held unit, portable tool
- Convenience operation
- Quadruple digit alphanumeric LCD display
- Low-consumption hibernation and power saving function
- Low battery indication
- WEEE & RoHS Compliant



### P-9903

#### Loop Relay Module

#### Overview

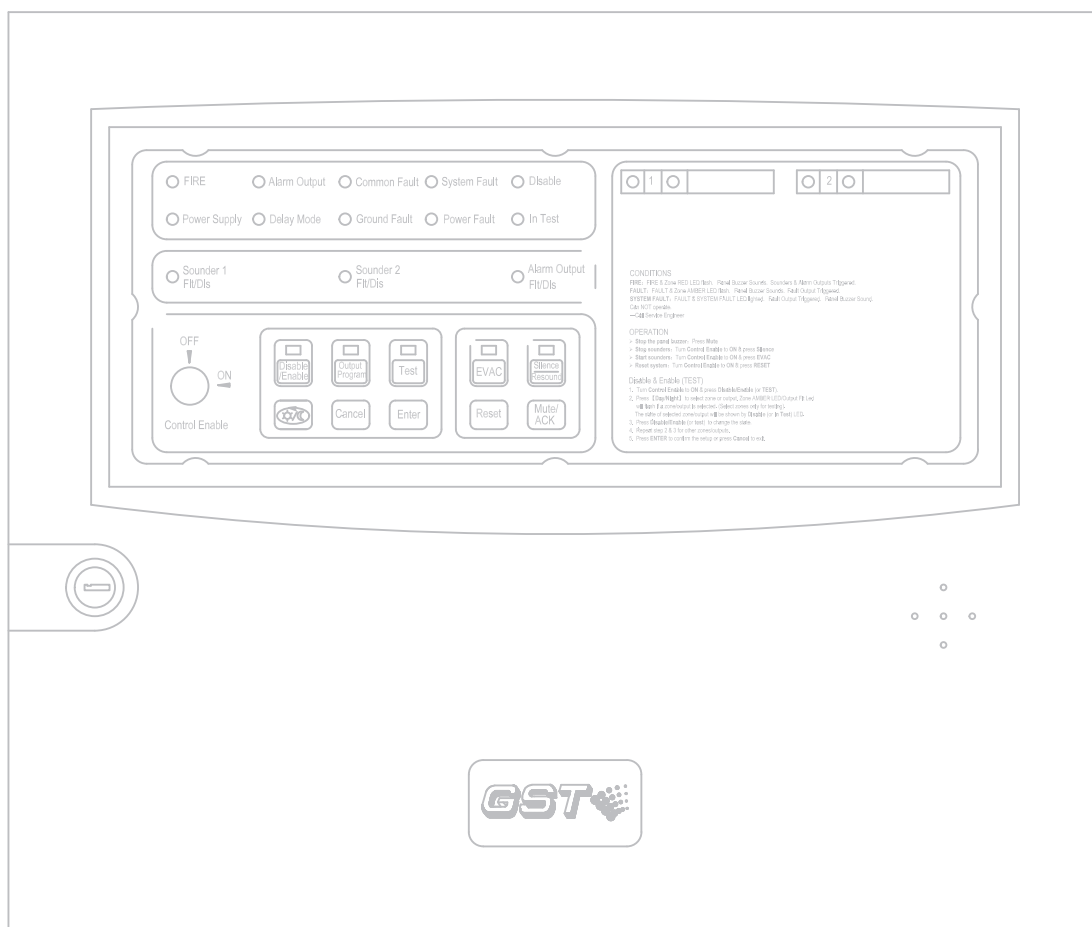
In fire alarm system, there is always requirement to expand loop distance. And when the loop runs through heavy interference area, the signal may need to be protected. The P-9903 loop relay module can provide such functions.

#### Features

- Enhance loop appearance of distance and reliability
- Increase 1000 meters of loop distance
- Maximum 2 pieces of relays can be connected in serial
- Opt-isolated output signal, resistant to industrial interference
- Output supports Class B loop connection only
- WEEE & RoHS Compliant



# EN54 Conventional Products





## GST-GMC

### Graphic Monitor Center

#### Overview

GstGMC3.0 Graphic Monitor Centre is a fire alarm system monitoring software. With friendly interface, the software may support 8 remote client stations plus local monitor station, making complete monitoring and control. Also with OLE for Process Control (OPC), the communication with fire alarm control panel can also be integrated into other systems. The related FACP includes GST200, GST200-2, GST200N, GST5000 and GST-IFP8.

#### Hardware Requirement

CPU: Pentium IV 1.7G or above  
Minimum free Hard disk: 10GB  
Memory: 512M or above

#### Operation System

Windows XP Professional (IE6.0 or above)  
Windows 7

## GST-DEF-KEY

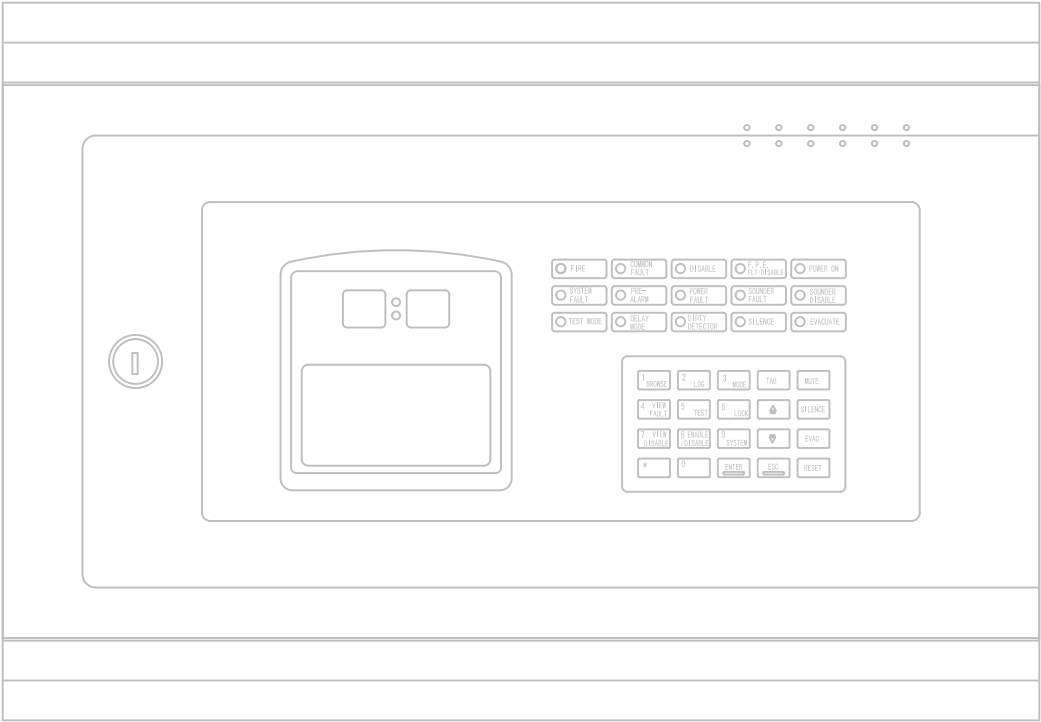
### USB Dongle

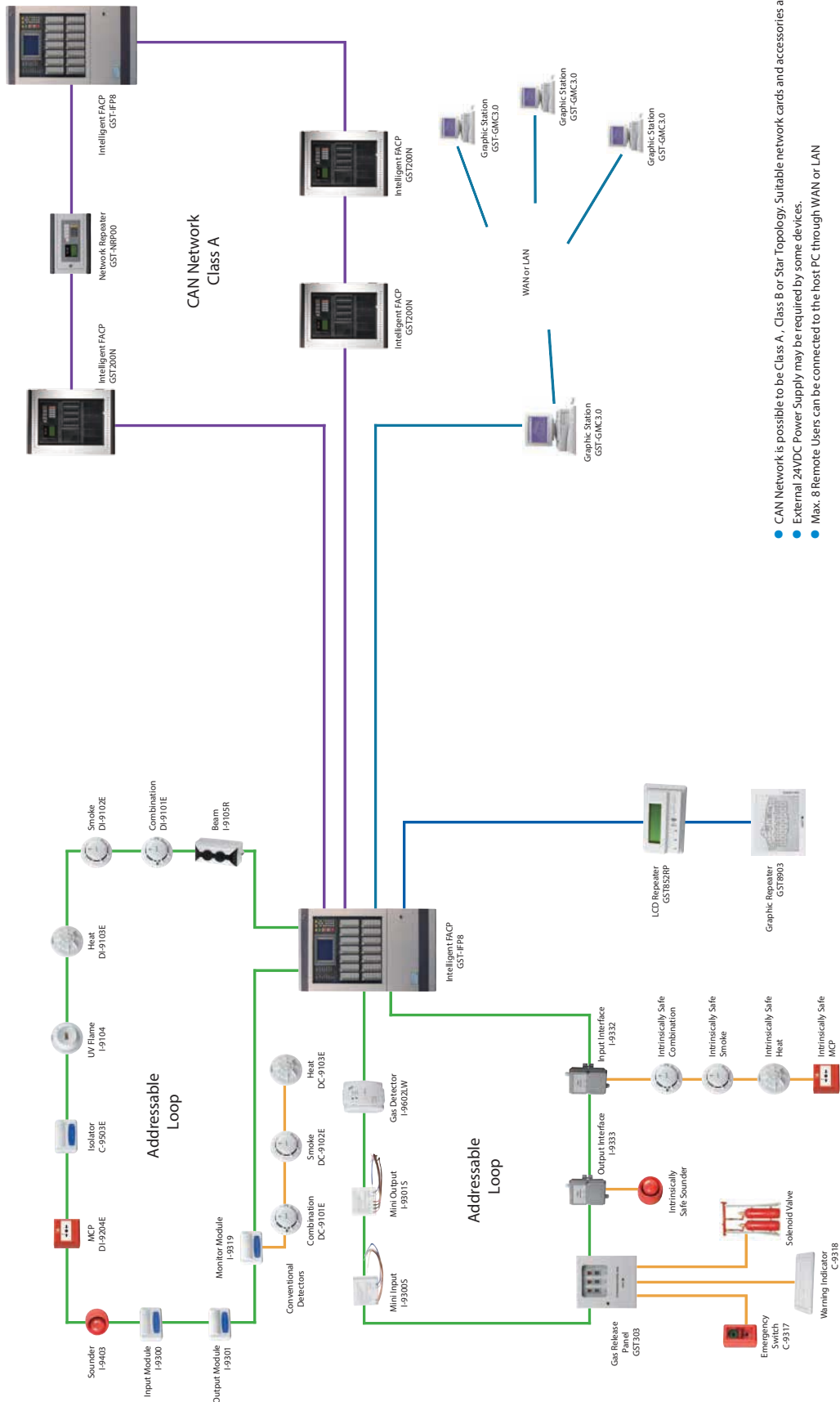


#### Overview

A sort of CPU or smart card based security device, to protect definition database of GST-DEF software. Unauthorized person without the dongle key is not possible to start the software.

# System Diagram

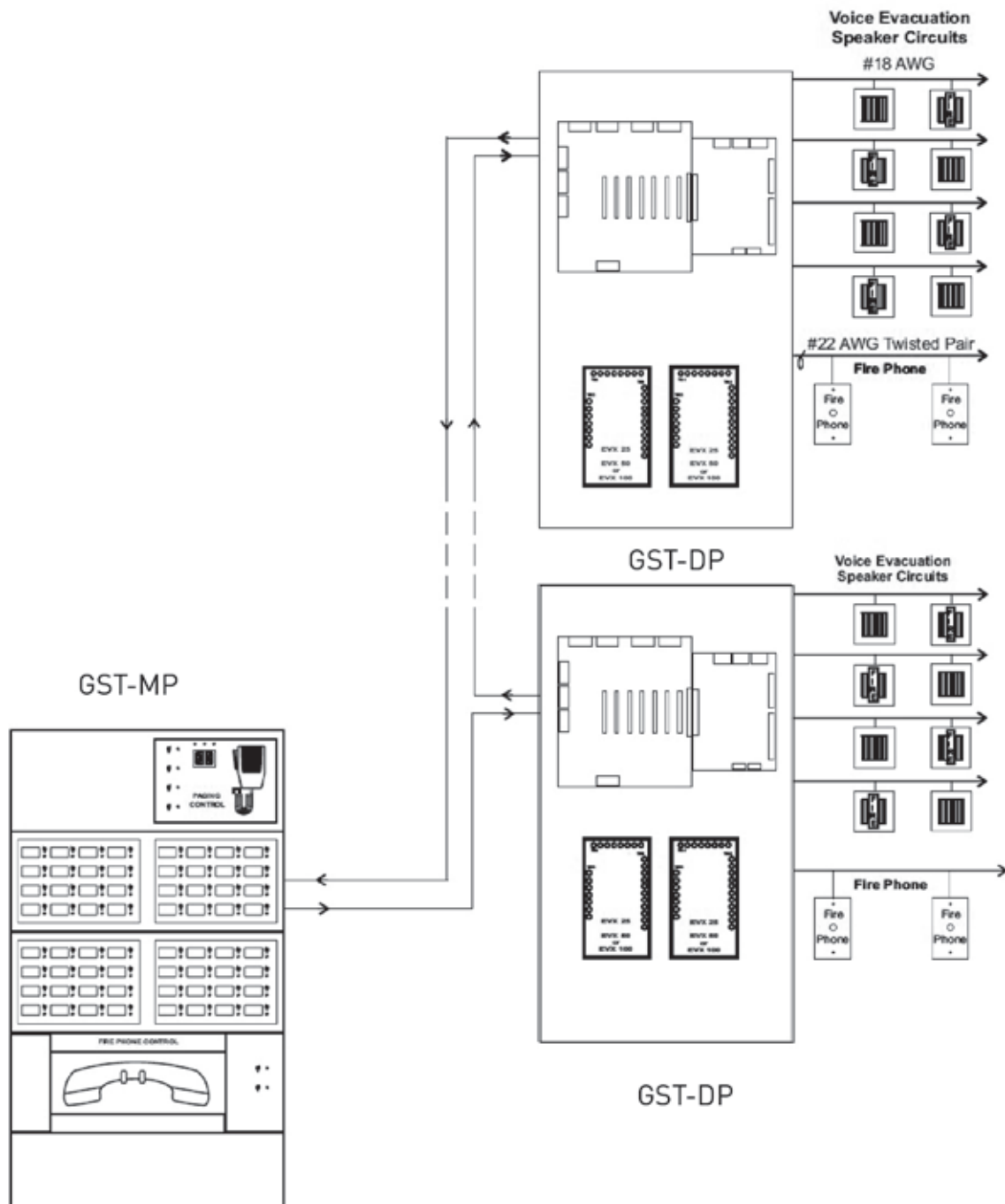




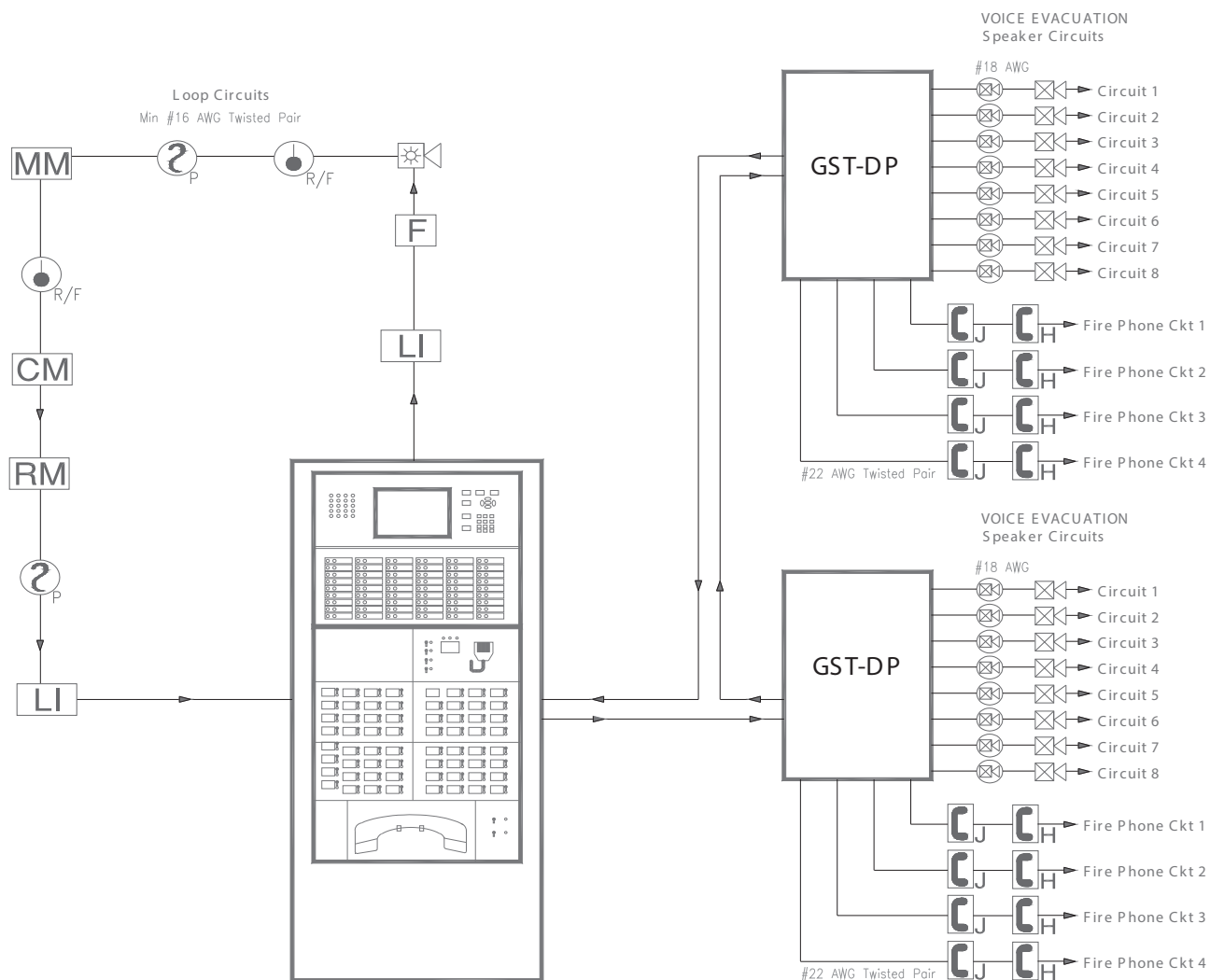
- CAN Network is possible to be Class A, Class B or Star Topology. Suitable network cards and accessories are available.
- External 24VDC Power Supply may be required by some devices.
- Max. 8 Remote Users can be connected to the host PC through WAN or LAN



## GST-VES system diagram

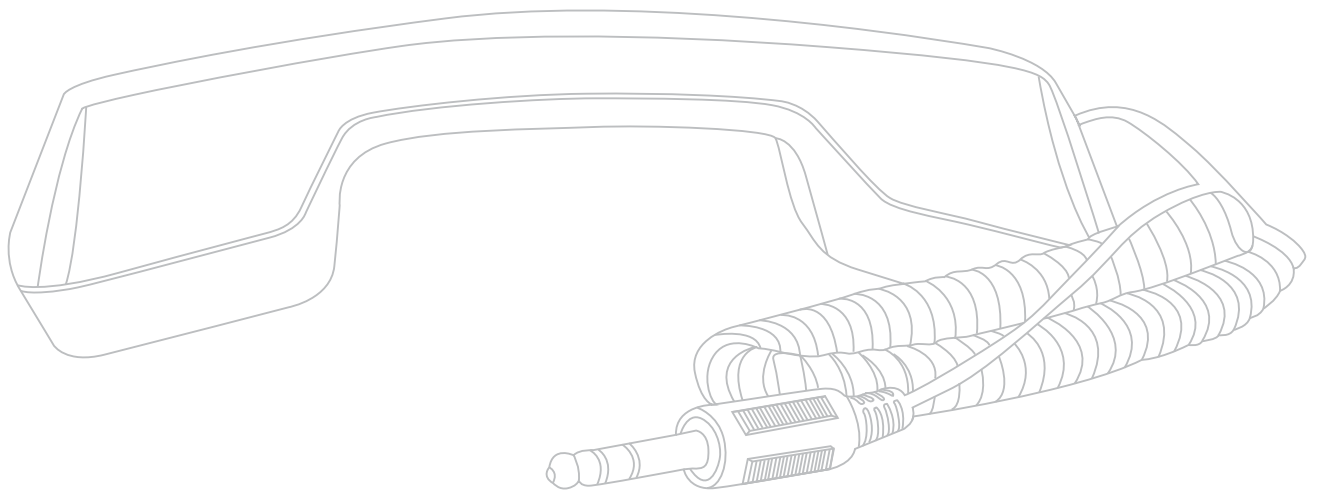


## System Diagram - GST-VES with GST-IFP8-VT



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# Emergency Telephone Products



## GST-FT8WN

### Fire Telephone Panel

#### Overview

GST-FT8WN fire telephone panel is conventional model, specialized for emergency communication. The panel is networkable up to 8 panels. Call from handset will be transferred to networked fire telephone panels automatically after not answered by the dedicated panel. Each zone is fully monitored of cable fault. Failure of one zone will not effect on other zones.



#### Specification

- Mains supply: 24VDC
- Zone Capacity: 8
- Installation Method: Wall-mount
- Handset Capacity: 3 fixed handsets or 10 sockets
- Dimension: 400mm x 280mm x 100mm

## GST-FT24N

### Fire Telephone Panel

#### Overview

GST-FT24N fire telephone panel is conventional model, specialized for emergency communication. The panel is networkable up to 8 panels. Call from handset will be transferred to networked fire telephone panels automatically after not answered by the dedicated panel.

Each zone is fully monitored of cable fault. Failure of one zone will not effect on other zones.



#### Specification

- Mains supply: 24VDC
- Zone Capacity: 24
- Installation Method: 19" Rack-mount
- Handset Capacity: 3 fixed handsets or 10 sockets
- Dimension: 482.5mm x 132.5mm x 225mm



## P-9911(H)

### Handsfree Speaker Fire Telephone

The P-9911(H) handset is wall mounted, compatible with GST-FT series of fire telephone panels, for emergency communication over a dedicated hard wired system normally located with the fire command centre.

Dimension: 160mm x 80mm x 35mm



## P-9911(F)

### Fixed Fire Telephone Handset

The fixed handset is wall mounted, compatible with GST-FT series of fire telephone panels. The unit should be mounted in a suitable and dry location at about 1.5m from finished floor level.

Dimension: 234mm x 146mm x 60mm



## P-9911(M)

### Mobile Fire Telephone Handset

P-9911(M) is a mobile type emergency telephone handset, which can be taken by the security guard, fireman or others on duty. The person can go to the nearest jack sockets, plug and talk to the central GST-FT series of fire telephone panels located in the command center.

Usually 2-5 handsets are recommended according to amount of telephone sockets.



## P-9911(J)

### Fire Telephone Jack

P-9911(J) telephone socket normally locates at the landing levels of all core stairwells and escape routes. The person on site with a mobile handset may just plug & talk to the control center. The unit should be mounted in a suitable and dry location at about 1.5m from finished floor level.

Dimension: 85mm x 85mm x 12mm