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.

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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**Overview**

The GST200N Intelligent Fire Alarm Control Panel includes GST200N-1 and GST200N-2. GST200N-1 is a single loop panel, which can be expanded to the 2-loop version GST200N-2. They are suitable for small buildings like offices, restaurants, stores, shops, etc., providing simple installation, operation, and easy maintenance.

**Features**

- Wide range power supply: 100-240VAC, 50-60Hz
- Maximum 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**

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</tbody>
</table>
**Overview**

GST-IFP8 Intelligent Fire Alarm Control Panel is modularized multi-loop model, can be expanded to 8 loops (Max. 10 loops without network function). The panel is suitable for small to medium projects.

**Features**

- Max. 999 zones, 140 have individual alarm and fault/disable LEDs and a label
- 8 Class A loops, total capacity of 1936 devices
- 15X60 LCD screen, assisting the 17 LEDs to display important information
- Compatible with full series of GST addressable and digital products
- Non-Volatile memory ensures the data does not loss even if power supply is accidentally removed

**Models**

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<td>Turkish</td>
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</tbody>
</table>
**EN54 Addressable Products**

**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

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**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

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**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
EN54 Addressable Products

**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 heater 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 processsed.
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

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**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

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**DZ-03**
Common Detector Base

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**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
Weather 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
EN54 Addressable Products

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.

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 3rd 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.

Features
- 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

B-9310
Back Box
EN54 Addressable Products

I-9300S
Addressable Input Interface
Loop powered addressable input interface, designed to monitor dry contact signal.

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-9301S
Addressable Output Interface
Provides 24VDC active output to drive fire-fighting or fire notification devices. External power supply is required.

I-9303
Addressable Dual I/O Module

Overview
The I-9303 module occupies two addresses, each address can be controlled independently, energises the 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 handhold programmer
- Loop-powered
- Output circuit monitored. Report fault message when the output circuit is short or broken
- Plug-in structure
I-9401
Addressable Sounder Strobe

Overview
I-9401 addressable sounder strobe can give audible and visual notification signal when activated by GST intelligent fire alarm control panel, to draw attention or evacuate in case of emergency.

Features
- Red Plexiglas lens, hi-light red, striking, long-life
- Electrically addressed, can be modified by programme
- Sound level over 85dB
- Two part plug in structure for easy installation

I-9403
Intelligent Sounder Strobe

Overview
I-9403 Intelligent Sounder Strobe and I-9406 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
- Take place of standard detector base DZ-03
- 4 working mode to meet various requirements

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-9404
Intelligent Sounder

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.

Features
- Electrically addressed, can be modified by programmer
- Take place of standard detector base DZ-03
- 4 working mode to meet various requirements
- 16 programmable tones
- Optional Evacuate + Alert mode
- Optional loop powered or external 24VDC powering
- Optional power saving mode or normal mode

I-9406
Addressable Flashing Beacon Base

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

C-9403 C-9404

Use with I-9403 I-9404 I-9407
C-9403 C-9404 for Surface
Cable Entry
### Overview
DI-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 / double-address mode.

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

### Overview
DI-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.

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

### Overview
C-9503E Loop Isolator

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

### Overview
DC-9504E Base Mount Isolator

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

#### 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

### Overview
C-9504E Base Mount Short Circuit Isolator

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

#### 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
EN54 Addressable Products

GST-100
Intelligent Fire Alarm Control Panel

Overview
A minimized single loop addressable fire panel, designed in accordance with EN54-2 standard, to achieve simple installation, operation and maintenance, which make it ideal for smaller systems.

Features
- Maximum 8 detection zones, each with independent fire LED, fault/disable LED and zone label
- Class A loop, maximum capacity of 128 addressable devices
- 12×32 lattice LCD assisting the LED indicators to display important information
- Non-volatile memory ensuring system data not lost on shutdown of power
- 3 relay outputs available which are SOUNDER OUTPUT (R+ and R-), ALARM OUTPUT and FAULT OUTPUT

P-9943
RS485 Communication Card
For connecting repeater panel or network

EN54 Addressable Products

Can100H-4
CAN Hub
4 Routes

Can100H-8
CAN Hub
8 Routes

Can100H-12
CAN Hub
12 Routes

Can100H-16
CAN Hub
16 Routes

Overview
In addressable system, GST intelligent panels can be linked by CAN network. Through CAN hub, the fire panel network can be connected in star topology.

Features
- Communication Distance: 3000 meters
- Nodes capacity of each branch: 112
- Total system capacity based on panel models
- Avoiding loop interference to affect the whole system due to isolation between trunk and branch, branch and branch

Can100F
Fiber Optic Converter

Features
- Transmission distance extends Max. 25 km
- Preventing against electromagnetic interference

Can100S
CAN Relay

Overview
The CAN100S is used to extend CAN network distance. And when the network nodes are over limit, the relay can expand system capacity.

Features
- Increase 3000 meters of network distance
- Expand network nodes capacity. Max. 112 nodes under each relay
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.

**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

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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.

**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
Overview

The A series conventional fire panels provide 2/4/8/16 conventional fire detection zone connections, meet the requirement of simple fire alarm applications. The pleasing color and fascia design makes it suitable to be installed either at the main entrance or corridor. Besides the ordinary EOLR cable monitor method, the AEOL solution can keep cable continuity even with detector removed. The panels carry forward the feature of simplified user operation of conventional systems, also provide advanced features like Day/Night mode, Output Program, Delay Output, Repeater Link, etc.

Specification

- Mains supply, 220/230VAC, 50/60Hz
- 2/4/8/16 zones. Each zone can have maximum 15 conventional detectors
- Compatible with GST conventional products
- Integrated charger and battery management program, fully comply with latest EN54-4 standard requirement
- Easy operation to enable/disable zones, sounder outputs and alarm output
- Output programmable for interlink between zones and sounder outputs, alert or evacuate tone, with or without delay
- Alarm output and Fault output are available for integrating into third party system
- Reserved repeater panel interface for fire alarm indication of multiple zones
- Dimension: 380mm x 320mm x 108mm

Overview

Instead of EOLR, with Active End of Line for conventional fire detection zones, it is possible to keep the connection continuity even if a detector is removed, and provide faulty indication at the same time, so that the downstream devices of the missing detector is still operational.

The AEOL is compatible with all GST conventional panel, and compatible with addressable zone interface I-9319. A diode base is required for each detector instead of standard base, DZ-03D is suitable for C range detectors, DB-01D is suitable for DC range detector.
**GST-RP16**

Conventional Repeater Panel

**Overview**

The GST-RP16 repeater panel is compatible with GST102A/4A/8A/16A conventional panels. It is powered from FACP directly, providing Zonal Fire and general Fault indication.

**Specification**

- Max. 16 zones
- Dimension: 280mm x 110mm x 46mm

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**GST-101**

Conventional Fire Alarm Panel

**Overview**

1 zone conventional fire panel suits small and temporary applications.

**Specification**

- Mains supply, 220/230VAC, 50/60Hz
- Zone capacity 15 conventional detectors
- Compatible with GST conventional products
- Dimension: 210mm x 297mm x 90mm

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**EN54 Conventional Products**

**DC-9101E**

Conventional 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 RR.

**Features**

- Strong environmental adaptability due to drift compensation
- Self-diagnostic
- Reed switch test
- Fire LED allows 360° viewing

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**DC-9102E**

Conventional 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. 3 sensitivity levels can be set.

**Overview**

DC-91xxE Conventional Detectors are new-generation products. With built-in microprocessor, the detectors are highly fixed with reliable fire judging program, which make it stable and reliable performance. With the new designed smoke chamber and intelligent program, the detectors have the ability of drift compensation and dust resistance. The detectors can be installed onto the common detector base DB-01. DB-01D will be suitable for connecting with Active End of Line Unit DP-9907. A remote indicator C-9314P can be connected to each detector.

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**DC-9103E**

Conventional 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 senser. 3 detection classes can be set A1R, A2S & BS.
### DB-01
Common Detector Base

### DB-01D
Diode Detector Base

Co-operate with DP-9907, keep loop continuity even if a detector is removed.

### DP-9907
Active End of Line

Co-operate with DB-01D, keep loop continuity even if a detector is removed.

### C-9314P
Remote Indicator

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### C-9104
Conventional Ultraviolet Flame Detector

**Overview**

C-9104 Conventional 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
- Self-diagnostic

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### P-9907
Active End of Line

Co-operate with DZ-03D, keep loop continuity even a detector is removed.

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### DZ-03D
Diode Detector Base

Co-operate with P-9907, keep loop continuity even a detector is removed.

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### DZ-03
Common Detector Base
EN54 Conventional Products

**GST-JL**

**Alarm Bell**

**Overview**

The bell has a simple structure and red coated steel casing, with novel pattern and easy installation. It is applicable to the fire alarm equipment of factory, workshop, hotel as well as large and medium sized buildings, provides clear and continuous alarm sound.

**Features**

- Re-settable [non-breaking glass] via special key
- Dual activation indication
- Friendly installation and test
- Wiring before termination

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**DC-9204E**

**Innovation Manual Call Point**

**Overview**

DC-9204E innovation manual call point is non-addressable. It alarms by pressing the glass. It can be simply connected to compatible conventional fire alarm system from various manufacturers. This MCP is suitable for public places. When there is fire, pressing the glass on this MCP can send alarm signal to compatible conventional fire alarm control panel.

**Features**

- 24VDC power, 23mA operation
- 6” bell, 95dB@3m

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**C-9401**

**Conventional Sounder Strobe**

**Overview**

C-9401 conventional sounder strobe can give audible and visual notification signal when powered by 24VDC, to draw attention or evacuate in case of emergency.

**Features**

- Red Plexiglas lens, hi-light red, striking, long-life
- Sound level over 85dB
- Two part plug in structure for easy installation

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**C-9403**

**Conventional Sounder Strobe**

**Features**

- Two parts construction with base mounted termination allows easy installation
- 2 selectable alarm tones

**C-9404**

**Conventional Sounder**

**Features**

- Two selectable tones

**C-94DB**

**Deep Base**

- Use with I-9403 I-9404 I-9407 C-9403 C-9404 for Surface Cable Entry

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**C-9401**

**Overview**

C-9401 conventional sounder strobe can give audible and visual notification signal when powered by 24VDC, to draw attention or evacuate in case of emergency.

**Features**

- Red Plexiglas lens, hi-light red, striking, long-life
- Sound level over 85dB
- Two part plug in structure for easy installation

---

**C-9403**

**Conventional Sounder Strobe**

**Features**

- Two parts construction with base mounted termination allows easy installation
- 2 selectable alarm tones

---

**C-9404**

**Conventional Sounder**

**Features**

- Two selectable tones

---

**C-94DB**

**Deep Base**

- Use with I-9403 I-9404 I-9407 C-9403 C-9404 for Surface Cable Entry
UL Listed Products

GST-IFP4M
Intelligent Fire Alarm Control Panel

Overview
GST-IFP4M Intelligent Fire Alarm Control Panel complies with UL864 standard with features of easy installation, operation and maintenance. All circuit boards are installed in a metal cabinet, providing a complete fire control system for most applications. Modularized structure allowed the panel possible to meet different requirements by adjusting the configuration.

Features
- 7-inch Touch Screen
- Wide range power supply 100-240V 50/60Hz
- Multi languages: Standard English language and other regional languages such as Portuguese, Spanish, Russian, etc.
- Support 1-6 loops in Class A style (additional battery box is required for 5 or 6 loops application)
- 242 addressable devices per loop mixing various types of devices, Max. 1452 addresses
- History records of 100,000 events
- 2 Power Limited Class B Notification Appliance Circuits (NAC), total load Max.2.5A/24VDC. The 2nd NAC can be set as AUX.
- “Walk test”, silent or audible
- PAS (Positive Alarm Sequence) per point
- Report device type mismatch and duplicated loop address
- CAN/Fiber Networking, Panel grouping
- Connecting with BMS via Modbus Card
Overview

GST-M200 is single loop intelligent fire alarm control panel. Class A loop can drive maximum 242 addresses. With LC200 loop card, the 2nd loop will expand system extra 242 addresses. The panel is programmable by keypad, or by PC through P-9930 communication card. To link with 3rd party system, the P-M9930Modbus card can provide data buffer for status of each device. P-M9960A CAN network card is used to build network of panels.

Features

- 2 Style Y Notification Appliance Circuits (NAC)
- 3 fixed relay outputs for fire/fault/supervisory
- Optional USB printer interface
- Optional graphic monitor station connection
- Walk Test function
- Positive Alarm Sequence (PAS) per point
- Advanced user friendly programming software including ‘Fuzzy Logic’

UL Listed Products

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC401</td>
<td>Single Loop Card</td>
</tr>
<tr>
<td>LC402</td>
<td>Dual Loops Card</td>
</tr>
<tr>
<td>P-9966A</td>
<td>CAN Class A Network Card</td>
</tr>
<tr>
<td>P-9956-ModBus</td>
<td>ModBus Card for 3rd party interfacing</td>
</tr>
<tr>
<td>P-9981</td>
<td>Zone Display Panel</td>
</tr>
<tr>
<td>P-9982</td>
<td>Zone Display and Control Panel</td>
</tr>
<tr>
<td>P-9983</td>
<td>Fibre Network Card</td>
</tr>
<tr>
<td>MP-401</td>
<td>Redundancy CPU Card</td>
</tr>
<tr>
<td>P-9981F</td>
<td>Zone Display Panel</td>
</tr>
<tr>
<td>P-9982F</td>
<td>Zone Display and Control Panel</td>
</tr>
</tbody>
</table>
UL Listed Products

DI-M9101
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.

Overview
DI-M91xx series UL listed intelligent detectors adopt the latest digital loop protocol, compatible with GST UL listed 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-M01. 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 (With BP-9314 Back Plate)

DB-M01
Common Detector Base

UL Listed Products

DI-M9102
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.

DI-M9103
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. Rate of rise detection can be switched off for certain applications.

C-9314P
Remote Indicator (With BP-9314 Back Plate)

DB-M01
Common Detector Base

DI-M9102
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.

DI-M9103
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. Rate of rise detection can be switched off for certain applications.

DI-M9300
Digital Single Input Module
The DI-M9300 single input module is designed to receive normally open or normally closed switch signals, and transmitting the signals to fire alarm control panel (FACP) through signaling line circuit (SLC) loop to FACP.

DI-M9301
Addressable Single Output Module
DI-M9301 Digital Single Input and Output Module provides dry contact output (normally open and/or normally closed) following command from fire alarm control panel, also possible receives switch signal (dry contact) from field equipment and transmits to FACP. The input and output can be programmed to monitor and control the same or different equipment.

DI-M9305
Digital Single Riser Output Module
DI-M9305 Digital Single Riser Output Module is designed to control the powering route, switches on and off the supply to end devices.

Overview
DI-M91xx series UL listed intelligent detectors adopt the latest digital loop protocol, compatible with GST UL listed 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-M01. 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 (With BP-9314 Back Plate)

DB-M01
Common Detector Base

DI-M9102
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.

DI-M9103
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. Rate of rise detection can be switched off for certain applications.

C-9314P
Remote Indicator (With BP-9314 Back Plate)

DB-M01
Common Detector Base

DI-M9300
Digital Single Input Module
The DI-M9300 single input module is designed to receive normally open or normally closed switch signals, and transmitting the signals to fire alarm control panel (FACP) through signaling line circuit (SLC) loop to FACP.

DI-M9301
Addressable Single Output Module
DI-M9301 Digital Single Input and Output Module provides dry contact output (normally open and/or normally closed) following command from fire alarm control panel, also possible receives switch signal (dry contact) from field equipment and transmits to FACP. The input and output can be programmed to monitor and control the same or different equipment.

DI-M9305
Digital Single Riser Output Module
DI-M9305 Digital Single Riser Output Module is designed to control the powering route, switches on and off the supply to end devices.
UL Listed Products

**DI-M9204**

Digital Manual Call Point

**Overview**

DI-M9204 digital manual call point adopts the latest digital loop protocol, compatible with GST UL listed 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

---

**DI-M9319**

Digital Zone Monitor Module

**Overview**

The DI-M9319 Digital Zone Monitor Module is designed to connect conventional detectors into addressable system. When any device reports fire signal, the module will transmit the signal to the fire alarm control panel which generates fire alarm and displays the address of the module. Maximum 30 conventional detectors or manual call points can be connected to each module. The module also provides a FORM-C dry contact output with the capacity of 2A @ 30VDC, 0.35PF.

**Features**

- Electrically addressed, can be modified by programmer
- Self-diagnostic
- LEDs for fault and active indication
- Digital communications with Panels
- Low power consumption
- Loop powered
- Ground fault detection (Need to work with the compatible FACP)
- DIN Rail mount, Surface mount
- UL864, NFPA [70, 72] approved

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**DC-M9503**

Short Circuit Isolator

**Overview**

Loop isolator is the protection facility that can isolate the trouble part from the whole loop in case of short circuit occurs, to ensure the normal operation of other parts and locate the isolated part. The base mounted isolator is compatible with DI-M91xx detectors.

**Features**

- Isolates faulty part of the loop in the event of a short circuit
- Automatically reset once the fault has been cleared
- LED status indicator
- Support Class A and Class B loop connection
- Maximum 128 isolators can be connected to each loop. Maximum 50 devices between two isolators.
DC-M9101
Conventional 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 fixed temperature.

Overview
DC-M91xx series UL listed conventional detectors are 2-wire type, alarm equivalent resistance 680Ω, possible to build fire alarm system together with UL listed conventional panels or addressable modules. The detectors can be installed onto the common detector base DB-M01. A remote indicator C-9314P can be connected to each detector.

Features
● Sensitivity levels 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

DC-M9102
Conventional 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.

DC-M9103
Conventional 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. Rate of rise detection can be switched off for certain applications.

Overview
The P-9910B hand held programmer is the programming tool for all GST addressable devices and some of conventional devices. It is also the tool to set sensitivities, working modes and other parameters.

Features
● Hand held unit, portable tool
● Convenience operation
● Quadruple digit alphanumeric LCD display
● Low-consumption hibernation and power saving function
● Low battery indication

UL Listed Products
DC-M9413 Series Sounder Strobe

Overview
The DC-M9413 Series Wall Mount Sounder Strobe is a fire alarm notification appliance that is designed for indoor use.

Features
- Field-configurable options for selecting dB output, sounder signal, and strobe signal output.
- Field-configurable switch for selecting the desired candela output.
- The candela output setting is locked in place and remains visible after final installation.
- This strobe features an enhanced synchronization circuit to comply with the latest requirements of UL 1971 Signaling Devices for the Hearing Impaired.
- Synchronized operation requires that you connect the DC-M9413 Series Wall Mount Sounder Strobe to a NAC output set for Synch Mode, or to a separate DC-M9410 Signal Synchronization Module.

Models

<table>
<thead>
<tr>
<th>Model number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-M9413R</td>
<td>Sounder-strobe, red</td>
</tr>
<tr>
<td>DC-M9413W</td>
<td>Sounder-strobe, white</td>
</tr>
</tbody>
</table>

DC-M9414 Series Sounder

Overview
The DC-M9414 Series Wall Mount Sounder is an audible fire alarm notification appliance that is designed for indoor use.

Features
The DC-M9414 Series Wall Mount Sounder includes field-configurable jumper options for selecting:
- Temporal or steady sounder output
- High dB or low dB output

Models

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>DC-M9414R</td>
<td>Sounder, red</td>
</tr>
<tr>
<td>DC-M9414W</td>
<td>Sounder, white</td>
</tr>
</tbody>
</table>
DC-M9416 Series Sounder Strobe

Overview

The DC-M9416 Series Ceiling Mount Sounder Strobe is a fire alarm notification appliance that is designed for indoor use.

Features

- Field-configurable options for selecting the desired dB output, temporal or steady sound output, and strobe signal output.
- Field-configurable switch for selecting the desired candela output.
- The candela output setting is locked in place and remains visible after final installation.
- This strobe features an enhanced synchronization circuit to comply with the latest requirements of UL 1971 Signaling Devices for the Hearing Impaired.
- Synchronized operation requires that you connect the DC-M9416 Series Ceiling Mount Sounder Strobe to a NAC output set for Synch Mode, or to a separate DC-M9410 Signal Synchronization Module.

Models

<table>
<thead>
<tr>
<th>Model number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-M9416R</td>
<td>Sounder-strobe, red, with FIRE marking</td>
</tr>
<tr>
<td>DC-M9416W</td>
<td>Sounder-strobe, white, with FIRE marking</td>
</tr>
</tbody>
</table>

DC-M9410

Signal Synchronization Module

The DC-M9410 Signal Synchronization Module provides precision synchronization for the following sounders and strobes:

- DC-M9413 Series wall mount sounder strobes
- DC-M9414 Series wall mount sounders
- DC-M9415 Series wall mount strobes
- DC-M9416 Series ceiling mount sounder strobes
Gas Release Control Products

GST301
Conventional Gas Extinguishing Control Panel

Overview
The GST301 is a standalone gas extinguishing control panel, providing 2 conventional detection zones to achieve double knock control, and an additional standard fire detection zone for other areas. The Duty and Standby Cylinder control can be automatic and manual controlled, with adjustable delay timer. The Built-in PSU and Charger can support 24 hours standby and 30 minutes activation period.

Specification
- Mains supply: 220/230VAC, 50/60Hz
- Backup Battery: 7AH/24VDC
- Sounder Output: 0.5A/24VDC
- Release Output: 2A/24VDC, Pulse
- Dimension: 300mm x 350mm x 110mm
### C-9317

**Emergency Gas Override Control**

C-9317 Emergency Gas Override Control is used to control the start and stop of gas extinguishing system, usually installed in areas to be protected. The control button is compatible with GST301 conventional and GST393/396 addressable gas release control panels.

- **Dimension:** 144mm x 90mm x 58.5mm

### C-9318

**Gas Extinguishing Warning Indicator**

C-9318 Gas Extinguishing Warning Indicator is the accessory of a gas extinguishing system, usually installed above the entrance of the protected area. The warning indicator is compatible with GST301 conventional and GST393/396 addressable gas release control panels.

- **Mains supply:** 24VDC
- **Dimension:** 348mm x 159mm x 29mm

### C-9329

**Gas Extinguishing Control Relay Module**

C-9329 Gas Extinguishing Control Relay Module is to cooperate with GST303 or GST306 Gas Extinguishing Control Panel, to carry out gas release solenoid control and cable monitoring.

- **Dimension:** 120mm x 80mm x 43mm
Overview
DI-9204Exd MCP is applicable to vessels, Zone 1 and 2 of explosive gas atmosphere and Zone 20, 21, and 22 of explosive dust atmosphere. It is also suitable for outdoor application. The MCP can work at addressable mode to connect with GST’s addressable FACP, or work at non-addressable mode to connect with 24VDC power and output dry-contact alarm signal.

Specification
- Operating Voltage: 24V
- Ingress Protection: IP65
- Material: ZL102 aluminum alloy, red
- Dimension: 219mm x 129mm x 95mm
- Ex Mark: ExdIIBT6 Gb / ExtbIIICT65°C Db
- Ex Certificate: CE12.1341
- ATEX Certificate: PRESAFE 14 ATEX 5549X

D-9105RExd
Digital Flame Proof Reflective Beam Detector

Overview
D-9105RExd Beam Detector is applicable to either commercial areas or hazardous industrial areas, such as Zone 1 and 2 of explosive gas areas and Zone 21 and 22 of combustible dust areas. The detector is able to be used as addressable mode connecting in GST fire alarm loop, or non-addressable mode providing dry contact outputs for fire and fault conditions.

Specification
- Operating Voltage: 24V
- Ingress Protection: IP66
- Material: Stainless steel, metallic gray
- Dimension: 344mm x 240mm x 212mm
- Ex Mark: Exd IIICT6 Gb / DIP A21 TA,T6
- Ex Certificate: CE11.1246X
**Explosion Proof Products**

**DI-9104Exd**
Digital Flame Proof UV Flame Detector

**Overview**
DI-9104Exd detects fire by picking up the ultraviolet light from flaming material. It’s designed for areas where an open fire is liable to occur with large amount of radiation and no smoldering stage. This detector can be applicable to zone 1 and 2 of explosive areas. The detector is able to work either in addressable mode connecting with GST intelligent fire alarm control panel, or in non-addressable mode to transmit signal by outputting different resistance values.

**Specification**
- Operating Voltage: 24V
- Ingress Protection: IP66
- Material: ZL102 aluminum alloy, silvery grey
- Dimension: 147mm x 106mm x 92mm
- Ex Mark: ExdIICT6Gb
- Ex Certificate: CE12.1356X
- ATEX Certificate: PRESAFE 14 ATEX 5547

**D-9107RExd**
Digital Flame Proof Dual IR Flame Detector

**Overview**
The detector uses two pyroelectric infrared sensors to detect the change of light signal of flame and background light signal at two bands of infrared spectrum through individual processing channels. The detector is applicable to explosive Zone 1 and 2, and Zone 21 or 22 with flammable dust. The detector is able to be used as addressable mode connecting in GST fire alarm loop, or non-addressable mode providing dry contact outputs for fire and fault conditions.

**Specification**
- Operating Voltage: 24V
- Ingress Protection: IP66
- Material: Stainless steel, metallic gray
- Dimension: 166mm x 235mm x 199mm
- Ex Mark: Exd II CT6 Gb / ExtbIIICT85°C Db
- Ex Certificate: CE11.1246X
- ATEX Certificate: PRESAFE 14 ATEX 5548X

**DC-9101(IS)**
Intrinsically Safe Combination Heat Photoelectric Smoke Detector
Ex Mark: Exib II CT6 Gb
Ex Certificate: CE11.2056
3 smoke sensitivity levels can be set. FT and RR can be set

**Overview**
The Intrinsically Safe Conventional Detectors are applicable to Zone 1 and Zone 2 of areas with explosion-proof requirement in petroleum and chemical industries. With explosion proof interface I-9332, the detectors can be connected into GST addressable system. Max.10 pieces (mixed) can be linked to each interface.
A common base DB-01(IS) is available for the detectors.

**DB-01(IS)**
Intrinsically Detector Base

**DC-9102(IS)**
Intrinsically Safe Photoelectric Smoke Detector
Ex Mark: Exib II CT6 Gb
Ex Certificate: CE11.2130

**DC-9103(IS)**
Intrinsically Safe Rate of Rise and Fixed Temperature Heat Detector
Ex Mark: Exib II CT6 Gb
Ex Certificate: CE11.2146

**Overview**

**DB-01(IS)**
Intrinsically Detector Base
 Explosion Proof Products

DC-9202(IS)
Intrinsically Safe Manual Call Point
Ex Mark: Exib II CT6 Gb
Ex Certificate: CE11.2142

Overview
The DC-9202(IS) Intrinsically Safe Conventional MCP is applicable to Zone 1 and Zone 2 of areas with explosion-proof requirement in petroleum and chemical industries. With explosion proof interface I-9332, the detectors can be connected into GST addressable system.

DC-9403(IS)
Intrinsically Safe Conventional Sounder/Strobe
Ex Mark: Exib II CT6 Gb
Ex Certificate: CE11.2146

Overview
The Intrinsically Safe Conventional Sounder/Strobe are applicable to Zone 1 and Zone 2 of areas with explosion-proof requirement in petroleum and chemical industries. With explosion proof interface I-9333, the detectors can be connected into GST addressable system. Each interface can only drive 1 sounder/strobe.

DC-9404(IS)
Intrinsically Safe Conventional Sounder
Ex Mark: Exib II CT6 Gb
Ex Certificate: CE11.2145

I-9332
Intrinsically Safe Interface

Overview
The I-9332 interface is to connecting conventional intrinsically safe detectors and MCP into GST addressable fire alarm system. Any of the following detectors and call points alarms will be reported to the panel shown as an address. The built-in Zener Barrier provides energy limitation to the hazard area.

I-9333
Intrinsically Safe Interface

Overview
The I-9333 interface is to connecting conventional intrinsically safe sounders into GST addressable fire alarm system. Any of the following detectors and call points alarms will be reported to the panel shown as an address. The built-in Zener Barrier provides energy limitation to the hazard area.
GST-AS-200 and GST-AS-300 Zener Safety Barriers are used to associate with intrinsically safe products. It provides protection by limiting the energy into explosive environment. It ensures the energy output always be controlled under a safe value in case of any kind of fault condition.

The 2 lines of GST-AS-300 are both fused, as of GST-AS-200 has only 1-line fused.

Max. Output Voltage: \( U_o = 28V \)
Max. Output Current: \( I_o = 93mA \)
I-9602LW-LPG
I-9602LW-NG

Addressable Gas Detector
- Liquefied Petroleum Gas
- Natural Gas

Overview
I-9602LW Addressable Gas Detector is used to detect leakage of home use combustible gas (LPG, Natural Gas) in such areas as houses, hotels and apartments. When leakage is detected, the detector will generate high buzzer alert sound, and provide a dry contact to turn exhaust fan, a 12VDC source to switch off the gas valve. The addressable detector can be linked into GST fire alarm system to carry out intelligent control.

Specification
- Operating Voltage: 24VDC
- Alarm Threshold: LPG: 2000×10^-6 (10% LEL)
  NG: 3000×10^-6 (6% LEL)
- Ingress Protection: IP30

C-9602LW-LPG
C-9602LW-NG

Conventional Gas Detector
- Liquefied Petroleum Gas
- Natural Gas

Overview
C-9602LW Conventional Gas Detector is used to detect leakage of home use combustible gas (LPG, Natural Gas) in such areas as houses, hotels and apartments. When leakage is detected, the detector will generate high buzzer alert sound, and provide a dry contact to turn exhaust fan, a 12VDC source to switch off the gas valve.

Specification
- Operating Voltage: 220VAC 50/60Hz
- Alarm Threshold: LPG: 2000×10^-6 (10% LEL)
  NG: 3000×10^-6 (6% LEL)
- Ingress Protection: IP30
Power Supply Unit

PSU24-5
PSU24-5A
Intelligent Power Supply Unit

Overview
The PSU24-5/5A power supply unit is to support heavy consumption application, part of the fire alarm devices require for external 24VDC power supply. The supply source is 230 VAC, 50/60 Hz. Nominal output load is 5A/24VDC. The built-in charger and maintenance-free sealed lead acid batteries ensure the standby supply. PSU24-5A is also possible to be connected into fire alarm loop, so that to report fault of mains loose, battery loose or output broken to the fire panel.

Specification
- Mains Supply: 230VAC+10%/-15%, 50/60Hz
- Rated Output: 5A/24.5V DC
- Backup Battery: 12Ah/24VDC
- Dimension: 400mm×318mm×128mm

PSU24-10
PSU24-10A
Intelligent Power Supply Unit

Overview
The PSU24-10/10A power supply unit is to support heavy consumption application, part of the fire alarm devices require for external 24VDC power supply. The supply source is 110-230 VAC, 50/60 Hz. Nominal output load is 10A/24VDC. The built-in charger and maintenance-free sealed lead acid batteries ensure the standby supply. PSU24-10A is also possible to be connected into fire alarm loop, so that to report fault of mains loose, battery loose or output broken to the fire panel.

Specification
- Mains Supply: 110VAC ~ 230VAC, 50/60Hz
- Rated Output: 10A/26.5V DC
- Backup Battery: 24Ah/24VDC
- Dimension: 520mm×350mm×156mm
**Specified Detector**

### R6601
Conventional Smoke Detector

**Overview**
The 4-wire type detectors are usually applied to security system, or standalone with relay output. Detector provides a normally-open contact, which will be closed when detector alarms.

**Specification**
- Operating Voltage: 12VDC (9.6VDC – 14.4VDC)
- Output Relay: 30VDC/1A
- Cabling Method: 4-wire, 2 for power, 2 for output
- Ingress Protection: IP23

### R6602
Conventional Heat Detector

### S-9102R
Stand Alone Smoke Detector

**Overview**
Battery powered stand alone smoke detector, adopting optical chamber, to detect smoke produced by fire, gives high volume sound notification in case of alarm. It is suitable for small projects like home application, small shop, pub, and etc.

The S-9102R provides a polarized N/O contact output (photoelectrical isolated) for further application.

The S-9102N provides network function, suitable for group usage of the detector. All networked detectors will sound together when anyone of them alarms.

**Specification**
- Operating Voltage: 2-piece of AA LR6 alkaline batteries
- Battery Life: 3 years
- Detection Area: 46-180m²
- Alarm Sound: 80dB@3m

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**Value Added Unit**

- **Lobby**
- **1st Floor**
- **Wash Room**
- **Smoking Room**
- **Office**
- **Auto**

- **Project1**

---

GstGMC3.0 Client

- Top Prev
- Last
- Next
- Last
- Enlarge
- Fire Action Fault Disable
- Reduce System Exit

System message: Connection is ok between client and server

Zoom : 100%

Last alarm information: none

2016-07-01
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.
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.
Emergency Voice Evacuation System

GST-VES

Description

GST Voice Evacuation System (GST-VES) is used to make emergency voice announcements to people inside a building. The system operates when a fire condition is detected, telling people to evacuate from the building. The GST-VES equipment meets National Fire Protection Association (NFPA) standard and is UL listed. Accomplished with a microphone, amplifier, and speakers, the building manager or fire department keys the microphone and broadcasts instructions in emergency condition. The GST-VES system consist one GST-MP panel and several GST-DP panels. The GST-MP Master Panel operates in conjunction with the Fire Alarm Control Panel (FACP) in a building to provide an automatic response to life safety emergencies. The GST-MP includes all the necessary features to provide an effective voice evacuation system. The GST-MP can be custom configured to satisfy the needs of any high rise application. The GST-MP system includes capacity for 6 channels of simultaneous audio. This provides for evacuation, alert stay-in-place, or other public address announcements and automatic messages. GST-DP Distributed Panel is connected to GST-MP in a voice evacuation system, receiving the command and voice signal from GST-MP, amplifying, and to provide 25V or 70V audio source to the speaker directly. GST-DP may be located either in the fire alarm control room or distributed on the floors in the building where is closer to the speakers.

Features

- True Multiplex 6 Channel Audio
- Integrated Fire Phone
- Integrated 2 Channel Digital Message Repeater
- Live Microphone Page to any zone
- Fast RS-485 Communication Protocol
- Fully Supervised
- Easy Installation and Operation
- Natural Sound Voice Recordings
- Built in Alarm and Alert Signals
- Up to 4 Minute Message Capacity
- Integrates with GST Fire Alarm Panel
- Interfaces with non GST Addressable and Microprocessor based Fire Alarm Panels
- 2 Minute Message Restart on Microphone Key
GST-MP
Master Panel

GST-MP is the Master Panel of GST voice evacuation system. The GST-MP provides the operating interface, control and audio signals, and supervision to the distributed panels. GST-MP also provides interface to the FACP either by RS232 or dry contact. GST provides two models of basic master panels. GST-MP16 has all basic features with 16 switches/LEDs and 16 inputs for FACP. GST-MP16x is same as GST-MP16 without cabinet. Both GST-MP16 and GST-MP16x does not include the fire phone. You may order the accessories to add fire phone, more switch/LED and input as you desire. GST-MP16 can be mounted next to the fire alarm control panel, and GST-MP16x shall be mounted into GST-IFP8-VT fire alarm control panel.

GST-DP
Distributed Panel

GST-DP is the Distributed Panels in the system. All GST-DP are connected to a master panel via RS485 line and provide the supervised 25V or 70V speaker circuit and fire phone circuits on the fields. Each GST-DP is powered individually and with backup battery. GST provides 4 basic models: GST-DP50, single channel, 50W GST-DP50, dual channel, 50W GST-DP100, single channel, 100W GST-DP100, dual channel, 100W All these models have 4 class B circuits, and do not have the fire phone option. All these models can be expanded for 4 to 16 fire phone circuits. 4 class A or 8 class B speaker circuit.

GST-IFP8-VT

The GST-IFP8-VT is the intelligent fire alarm control panel (FACP) in the emergency voice evacuation system. In a situation of fire the FACP triggers the GST-MP and GST-DP to activate the evacuation alarm automatically. The connection between FACP and GST-MP may be RS232 or hard wired digital input. GST-IFP8-VT is built for integrated with GST-MP16x to form a single panel for both fire alarm control and voice evacuation controls. GST-IFP8-VT may have max 8 loops, with 242 addresses on each loop. The FACP can also link to other fire alarm control panel to form fire alarm panel network.

System Components

MFP
Master Fire Phone Card

Accessory on master panel for fire phone. Add 1 MFP to GST-MP16 or GST-MP16x if the fire phone is required.

GST-MFH-A
Master Fire Phone Handset Assembly

Accessory on master panel for fire phone. Add 1 MFH to GST-MP16 or GST-MP16x if the fire phone is required.

SLC
Switch LED Card

Accessory on master panel. One SLC card provides 16 switches and LED’s for manual control at Master Panel. Add SLC cards if more than 16 switch/LED are required.

SSC
Switch Scan Card

Accessory on master panel. Each SSC card controls up to 8 switch/LED cards. One SSC card is included in the basic GST-MT master panel.
## System Components

### GST-XI
**Extended Input Interface card**
Accessory on master panel. One XI card provides 16 additional inputs to master panel. Maximum 7 XI can be connected to one II card.

### GX-F0
**Fiber Optic Interface**
Optional accessory for master panel and the distributed panels. GX-F0 provides termination for fiber optic communications between the master panel and the distributed panels through multi mode fiber optic cable.

### MBK
**Mother Board Relays**
One MBK card provides 4 class “B” speaker circuits. And two MBK cards provide 8 “class B” or 4 “class A” speaker circuits in one distributed panel. One MBK card is included in basic GST-DP panel.

### FPI
**Fire Phone Interface**
Each FPI provides 4 supervised class “B” fire phone circuits in DP panel. Maximum 2 FPI (8 phone circuits) can be installed in one GST-DP.

### GVX-BA
**Backup amplifier switching relay**
One required for each Distributed Amp when automatic switching/redundant amplification is needed. On a single Channel system the backup amplifier can be located in any GST-DP panel. On a Dual Channel system an additional AMI card, and EVX #E Amplifier assembly is required (the # represents the largest power amplifier in the system 50/100).

### FP02
**Fire Phone Interface Terminal**
One FP02 provides 4 additional terminals for fire phone circuits. It is required for the 2nd, 3rd and 4th FPI Fire Phone Interface in GST-DP.

### GVX-50E / GVX-100E
**Amplifier Module**
GVX-50E is 50W amplifier module and GVX-100E is amplifier module. The amplifier module is included in basic GST-DP. Amplifier module may be ordered as spare or adding extra output power to GST-DP. Max 2 amplifier modules can be mounted in one GST-DP.

### XFMR
**Transformer**
This transformer is for amplifier module. 220VAC, 50Hz. It is required if additional amplifier is added to GST-DP.
System Components

P-9935EVAX
Communication Card

This card provides interface between GST-IFP8-VT FACP and GST-MP via RS232 port. It is not required if the dry contact interface is employed.

Configuration and Order Information

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Product Description</th>
<th>Default QTY</th>
<th>Max. QTY</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>GST-MP16</td>
<td>Master panel, with 16 inputs, 16 Switches/EDs, with Cabinet</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GST-MP16x</td>
<td>Master panel, with 16 inputs, 16 Switches/EDs, without Cabinet</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>GST-DP50</td>
<td>Distributed panel, Dual channels, 50 Watts, 4 Class B speaker circuits</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>GST-DPS50</td>
<td>Distributed panel, Single channel, 50 Watts, 4 Class B speaker circuits</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>GST-DP100</td>
<td>Distributed panel, Dual channels, 100 Watts, 4 Class B speaker circuits</td>
<td>N/A</td>
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<tr>
<td>GST-DPS100</td>
<td>Distributed panel, Single channel, 100 Watts, 4 Class B speaker circuits</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>SLC</td>
<td>Switch LED Card</td>
<td>1(1)(2)</td>
<td>4</td>
<td>Optional components for Master Panel, More than 16 switches and LED's required, another SLC is needed</td>
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<tr>
<td>SSC</td>
<td>Switch Scan Card</td>
<td>1(1)(2)</td>
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<td>Optional components for Master Panel ,Every 8 SLC needs one SSC</td>
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<td>MFP</td>
<td>Master Fire Phone Card</td>
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<td>1</td>
<td>Optional components for MP</td>
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<tr>
<td>GST-MFH-A</td>
<td>Master Fire Phone Handset Assembly</td>
<td>0</td>
<td>1</td>
<td>Optional components for MP</td>
</tr>
<tr>
<td>GX-FD</td>
<td>Fiber Optic Interface</td>
<td>0</td>
<td></td>
<td>Components for GST-MP and GST-DP for networking via multi-mode fiber</td>
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<tr>
<td>FPI</td>
<td>Fire Phone Interface</td>
<td>0</td>
<td>4</td>
<td>Optional components for Distributed Panel, 1 supervised Class &quot;B&quot; Fire Phone circuits per FPI</td>
</tr>
<tr>
<td>FPO2</td>
<td>Fire Phone Output Adapter</td>
<td>0</td>
<td>3</td>
<td>Optional components for Distributed Panel, More than 1 FPI is required in a Distributed Panel, one FPO2 card is needed for each</td>
</tr>
<tr>
<td>GVX-50E</td>
<td>Amplifier Module</td>
<td>1(1)</td>
<td>1(2)</td>
<td>Optional components for GST-DPS50, if converts from GST-DPS50 to GST-DP50,one GVX-50E is needed</td>
</tr>
<tr>
<td>GVX-100E</td>
<td>Amplifier Module</td>
<td>1(3)</td>
<td>1(3)</td>
<td>Optional components for GST-DPS100, if converts from GST-DPS100 to GST-DP100,one GVX-100E is needed</td>
</tr>
<tr>
<td>MBK</td>
<td>Mother Board Relays</td>
<td>1(1)(4)(5)(6)</td>
<td>2</td>
<td>Optional components for Distributed Panel, One additional MBK needed for 8 Class &quot;B&quot; or 6 Class &quot;A&quot; Speaker Circuits on Distributed Panel</td>
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<tr>
<td>P-9935EVAX</td>
<td>RS232 Communication Card</td>
<td>0</td>
<td>1</td>
<td>Interface card between GST-IFP8 or GST-IFP8-VT and Master panel, Switches/EDs, GST-IFP8 panel and GST-MP</td>
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<tr>
<td>WXR</td>
<td>Transformer</td>
<td>2(10)</td>
<td>2(10)</td>
<td>Optional components for convert single channel Distributed panel to dual channels Distributed panel, One transformer required per amplifier</td>
</tr>
<tr>
<td>XI</td>
<td>Extended Input Interface</td>
<td>0</td>
<td>7</td>
<td>Optional components for Master panel, connect, connect with II Input interface card, provides additional 16 inputs per XI card</td>
</tr>
</tbody>
</table>

(1) Configuration for GST-MP16
(2) Configuration for GST-MP16x
(3) Configuration for GST-DP50
(4) Configuration for GST-DPS50
(5) Configuration for GST-DP100
(6) Configuration for GST-DPS100

Technical Specification:
- Communications: RS-485 Standard, 1M Baud rate
- Primary Supply: 220VAC
- Backup Battery: 7AH/24VDC(GST-MP1, 17AH/24VDC(GST-DP))
- Electrical Ratings: All Circuits @ 24VDC
- End of Line Resistor: 10kΩ
- Maximum Cable Length: 4,000 feet, #16 AWG, between panels, 50,000 feet in the overall system.
- Recommended Cable: 16 or 18 AWG, (Low Capacitance) UTP Unshielded-Twisted pair.
GST-VES system diagram

System Diagram

System Diagram - GST-VES with GST-IFP8-VT
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 affect 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 affect 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
Emergency Telephone Products

P-9911(H)
Handfree 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 88mm 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
note
IMPORTANT: This publication is a generic version in which product information is shown for informational purposes only and does not constitute a specific commitment or guarantee. We are constantly pursuing the improvement of product technology to improve product performance, for which we reserve the right to adjust the configuration and technical information of the related products without notice. In addition, the description of system performance in this publication applies only to the usual situation. As a result, there may be a variety of unpredictable special circumstances in the real world, so the realization of the relevant product performance will depend on the professional investigation and analysis and the design plan. Please contact us and we will be happy to provide you with professional advice.