



A UTC Fire & Security Company

# Fire Alarm System

*The Intelligent Solution*

Ver. 2010



## About GST

GST is a leading fire alarm system and solution provider in China. It's primarily engaged in manufacturing and distribution of fire alarm systems, fire network systems and other products such as video entry systems, electronic power meters, and building automation systems. Founded in 1993, GST has become the largest by market share and sales revenue in local market, and the brand is awarded by China State Administration for Industry and Commerce as the only "well-known trademark" in the industry.

UTC Fire & Security (UTCFS), a global leader in fire safety and security, with its related entities, delivers the latest technologies on fire and electronic security throughout the world. UTCFS firstly invested in GST by acquiring 9.9 percent of outstanding shares in 2006, and then merged the company in July of 2009.

Integrating resources on R&D, distribution and cost control of GST, and the strength on brand, capital and management of UTCFS, along with Chubb, Kidde, Marioff, Red Hawk, Onity and Lenel, a comprehensive array of brands feature in the industry, UTCFS provides one-stop-shopping solutions across the world, to enhance life quality and facilitate community development of the region.

GST manufactures over 7 million detectors and modules as well as 30,000 control panels per year, which makes the company the largest fire detection manufacturer in China.

At the same time, our main devices are applying robotic controlled Pick & Place Machines and Surface Mount Technology in strict conformity with ISO9001 and ISO10012.1, which is reviewed by LPCB annually.

Over the years GST has acquired certification from various international testing bodies including UL, LPCB, CE, PSB, SAI, HKFSD, CCC and etc. With its high quality fire & life safety products and superior after-sales services, GST has built its reputation in the globe and solid its product distribution in more than 80 countries and regions from Europe, Asia, Africa, Oceania to America.





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# **UL Listed Fire Alarm System**



GST-M200



## Intelligent Fire Alarm Panel

- Single loop fire alarm control panel listed by UL
- Loop capacity 230 intelligent devices
- 2 Style Y Notification Appliance Circuits (NAC)
- 3 fixed relay outputs for fire/fault/supervisory
- Optional GMC connection
- Walk Test function
- Positive Alarm Sequence (PAS) per point
- Programmable from panel keypad
- Advanced user friendly programming software including 'Fuzzy Logic'

## Technical Specifications

- AC Power supply:  
120V/60Hz/2A or 220VAC 50Hz/1A  
Power cable size minimum 14AWG
- Operating Environment:  
Temperature: 0~+ 40°C  
Relative Humidity: 95%
- Dimension: 406mm x 666mm x 130mm



I-9102(UL)



I-9103(UL)



### Intelligent Optical Smoke Detector

- Aesthetically pleasing low profile design
- 8 Bit intelligent processor with A/D converter
- Built in algorithm maps for false alarm rejection
- Electronically addressed
- Twin LED for 360° vision
- Removable optical chamber for easy cleaning and maintenance

### Technical Specifications

- Operating voltage: 24VDC
- Operating current:
  - Standby current: 0.8mA
  - Alarm current 2mA
- Operating Environment:
  - Temperature: 0 ~ +37.8°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 50mm

### Intelligent Dual Heat Detector

- Fixed Temperature and Rate of Rise Heat Detection
- Aesthetically pleasing low profile design
- 8 Bit intelligent processor with A/D converter
- Electronically addressed
- Twin LED for 360° vision

### Technical Specifications

- Operating voltage: 24VDC
- Operating current:
  - Standby current: 0.8mA
  - Alarm current 2mA
- Detection Angle: <45°
- Operating Environment:
  - Temperature: 0 ~ +37.8°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 45mm



DI-M9204



C-9503



DZ-03(UL)



### Digital Manual Call Point

- Re-settable (non-breaking glass) via special key
- Advanced digital communication
- Electronically addressed
- Friendly installation and test
- Wiring before termination
- Semi-flush mount installation
- Optional back-box for surface mount
- Stylish pleasing design

### Technical Specifications

- Protection Rating: IP43
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current 0.6mA
  - Alarm Current 1.8mA
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Application: Indoor use
- Dimensions: 87.1 x 87.1 x 58 mm

### Short Circuit Isolator

- Isolates faulty part of the loop in the event of a short circuit
- Automatically reset once the fault has been cleared
- LED status indicator

### Technical Specifications

- Operating Voltage: 24VDC
- Operating Current:
  - Monitor Current 3mA
  - Action Current 15mA
- Operating Environment:
  - Temperature: 0 ~ +49°C
  - Relative Humidity: 93%
- Dimensions: 120mm x 80mm x 39mm

### Detector Base

- Common Base for termination and fixing of detectors, compatible for I-9102(UL), C-9102(UL), I-9103(UL) & C-9103(UL)
- Non-electronic component





I-M9300



I-M9301



### Addressable Input Module

- Single input module suitable for monitoring switch contact of remote equipment or connecting conventional detectors
- Loop power for contact input
- Used as interface with conventional detectors and additional 24VDC is required
- Connection mode can be set by handhold programmer (P-9910B)
- Conventional connection is monitored for cable fault
- Electronically addressed
- 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

### Technical Specifications

- Operating Voltage: 24VDC
- Operating Current:
  - Loop
  - Standby Current 1mA
  - Action Current 5mA
  - 24VDC
  - Standby Current <10mA
  - Action Current <60mA
- Operating Environment:
  - Temperature: 0~ +49°C
  - Relative Humidity: 93%
- Dimension: 120mm x 80mm x 43mm

### Addressable Output Module

- Single output module
- Loop powered for dry contact relay output. Additional 24VDC is required for power output
- Connection mode can be set by handhold programmer (P-9910B)
- Power output line is monitored for cable fault
- Electronically addressed
- 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

### Technical Specifications

- Operating Voltage: 24VDC
- Operating Current:
  - Loop
  - Standby Current 1mA
  - Action Current 3mA
  - 24VDC
  - Standby Current <5mA
  - Action Current <20mA
- Output capacity
  - Dry contact relay: 2A/24VDC
  - Power output: 1A/24VDC
- Operating Environment:
  - Temperature: 0~ +49°C
  - Relative Humidity: 93%
- Dimension: 120mm x 80mm x 43mm



C-9102(UL)



C-9103(UL)



DC-M9204



### Conventional Optical Smoke Detector

- Aesthetically pleasing low profile design
- Twin LED for 360° vision
- Removable optical chamber for easy cleaning and maintenance

### Technical Specifications

- Operating voltage: 24VDC
- Operating current:
  - Standby current: 0.06mA
  - Alarm current 30mA
- Operating Environment:
  - Temperature: 0 ~ +37.8°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 50mm

### Conventional Dual Heat Detector

- Fixed Temperature and Rate of Rise Heat Detection
- Aesthetically pleasing low profile design
- 8 Bit intelligent processor with A/D converter
- Twin LED for 360° vision

### Technical Specifications

- Operating voltage: 24VDC
- Operating current:
  - Standby current: 0.06mA
  - Alarm current 30mA
- Detection Angle: <45°
- Operating Environment:
  - Temperature: 0 ~ +37.8°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 45mm

### Innovative Manual Call Point

- Re-settable (non-breaking glass) via special key
- Friendly installation and test
- Wiring before termination
- Semi-flush mount installation
- Optional back-box for surface mount
- Stylish pleasing design

### Technical Specifications

- Protection Rating: IP43
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current 0mA
  - Alarm Current 30mA
- Operating Environment:
  - Temperature: -10 ~ +50°C
  - Relative Humidity: 95%
- Application: Indoor use
- Dimensions: 87.1 x 87.1 x 58 mm



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# Digital Intelligent Devices



DI-9102



### Digital Intelligent Optical Smoke Detector

- Advanced digital communication
- Built in 8 bit microprocessor
- Algorithm maps for faster response and false alarm rejection
- Secure and speedy communication
- Intelligent drift compensation
- Self diagnosis and history log
- Electronic addressing
- Duplicated address report
- Sensing chamber for exceptional dust proof ability and LED for 360° vision
- Built in remote indicator output
- Unique low profile design
- EN54 compliance

### Technical Specifications

- Standard: EN54-part7
- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 0.6mA
  - Alarm Current: 3mA
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Field Programmable Sensitivity: 0.102dB/m ~ 0.316dB/m-3 levels
- Dimensions: Diameter 100mm, Height 44.5mm



DI-9103



### Digital Intelligent Dual Heat Detector

- Built in 8 bit microprocessor
- Advanced digital communication
- Secure and speedy communication
- Self diagnosis and history log
- Electronic addressing
- Duplicated address report
- LED for 360° vision
- Built in remote indicator output
- Unique low profile design
- Fixed temperature response is adjustable
- EN54 compliance

### Technical Specifications

- Standard: EN54-part5
- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 0.6mA
  - Alarm Current: 3mA
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Detector Class: A1R, A2R, BR, A1S, A2S, BS
- Dimensions: Diameter 100mm, Height 41mm



DI-9101



DB-01

### Digital Intelligent Multi Sensor

- Combined all the features of DI-9102 Optical and the DI-9103 Heat detector
- Advanced digital communication
- Electronic addressing
- LED for 360° vision
- Sensing chamber for exceptional dust proof ability
- Ideal alternative to Ionization detector
- Low profile design

### Technical Specifications

- Standard: EN54-part 5 / 7
- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 0.6mA
  - Alarm Current: 1.5mA
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Field Programmable Sensitivity: 0.102dB/m ~ 0.316dB/m-3 levels
- Dimensions: Diameter 100mm, Height 44.5mm

### Standard Base

- Standard base for digital DI/DC range of detectors
- No electronics, safe on the time of installation



DI-9204



D-92FC

### Digital Manual Call Point

- Re-settable (non-breaking glass) via special key
- Advanced digital communication
- Electronically addressing
- Friendly installation and test
- Wiring before termination
- Semi-flush mount installation
- Optional back-box for surface mount
- Stylish pleasing design
- LPCB Approved

### Technical Specifications

- Protection Rating: IP55
- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 0.6mA
  - Alarm Current: 1.8mA
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Application: Indoor use
- Dimensions: 87 x 87.5 x 58 mm, Surface Mount  
87 x 87 x 23.5 mm, Flush Mount

### Protective Flip Cover

- Protects manual call point from accidental activation
- Meets requirement of '2 step operation' in consultant specifications
- Suitable for manual call points DI-9204 and DC-9204



D-92WPB

### Weather Proof Box

- IP65 protective enclosure for manual call points
- Large internal space enough for most types of MCP
- Dimensions: 110mm x 119mm x 44.5mm



DC-9504

### Base Mount Isolator

- In the event of a short circuit isolates faulty parts of the loop
- Automatically resetting once the fault has cleared
- Compatible with digital range of detector
- Can be used standalone with cover or in stead of standard base
- Replace standard base of digital range detector (DB-01)
- Cost effective installation without the need for additional cabling
- Features as per C-9503
- LED status indicator

### Technical Specifications

- Operating Voltage: 24VDC
- Active Current: 1A
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Application: Indoor use
- Visual Indicator: Yellow LED (lit steady when alarm, off normal state)
- Dimensions: Diameter 100mm, Height 37.5mm (with cover)



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# **Intelligent** Fire Alarm Devices





I-9102



### Intelligent Optical Smoke Detector

- Aesthetically pleasing low profile design
- 8 Bit intelligent processor with A/D converter
- Built in algorithm maps for false alarm rejection
- Electronically addressed
- Twin LED for 360° vision
- With Remote Indicator output
- Adjustable smoke detection sensitivity
- Removable optical chamber for easy cleaning and maintenance
- LPCB Approval

### Technical Specifications

- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 0.8mA
  - Alarm Current: 2mA (5mA for RI)
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 50mm



I-9103



### Intelligent Dual Heat Detector

- Fixed Temperature and Rate of Rise Heat Detection
- Aesthetically pleasing low profile design
- 8 Bit intelligent processor with A/D converter
- Electronically addressed
- Fixed temperature response is adjustable
- With Remote Indicator output
- Twin LED for 360° vision
- LPCB Approval

### Technical Specifications

- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 0.8mA
  - Alarm Current: 2mA (5mA for RI)
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Detector Class: A1R
- Dimensions: Diameter 100mm, Height 50mm



I-9101



I-9104



DZ-03

### Intelligent Multi Sensor

- Combining all the features of the I-9102 Optical and the I-9103 Dual Heat Detector to provide the ultimate cover for life safety systems
- Ideal alternative to Ionization detectors
- Adjustable smoke detection sensitivity

### Technical Specifications

- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 0.6mA
  - Alarm Current: 1.8mA
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Field Programmable Sensitivity: 0.1dB/m~0.56dB/m-3 levels
- Dimensions: Diameter 100mm, Height 50mm

### Intelligent Ultraviolet Flame Detector

- Sensitive Ultraviolet sensor that detects the UV rays produced by a flame
- Aesthetically pleasing Low profile design
- Dust / corrosion / humidity resistant
- Electronically addressed
- Standard calibration set to detect a 3cm flame at 6 metres
- Effective range 12 metres

### Technical Specifications

- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 2mA
  - Alarm Current: 2.5mA
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Detection Angle: 80°
- Dimensions: Diameter 100mm, Height 41mm

### Standard Detector Base

- Base for termination and fixing of detectors
- Non-electronic component
- Common base for I-9101/1/2/3/4



I-9105R



I-9106

## Intelligent Reflective Beam Detector

- Range 8 -100 Metres
- 2 selectable levels of sensitivity adjustment
- Compatible with conventional Panel
- Ideal for Atriums, Warehouses, Shopping Centres, Airport Terminals, etc.
- Simple and cost effective installation of transmitter and reflective 'honey comb' mirror
- Quick and easy to set up and align with visual green LED indication that flashes faster or slower subject to signal strength. Replace the cover and the detector will self calibrate to the required level.
- LPCB Approved

## Technical Specifications

- Operating voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:

Used as addressable detector	Used as conventional detector
Power Current: Commission Current: 20mA Standby Current: 8mA Alarm Current: 12mA Loop Current: Standby Current: 0.6mA Alarm Current: 2mA	Power Current: Commission Current: 20mA Standby Current: 12mA Alarm Current: 22mA

- Detection Range: Length from 8 to 100 metres, with 7 metres in both sides
- Wiring: Non-polarized two-core 24VDC
- Non-polarized two-core detection loop
- Operating Environment:  
 Temperature: -10 ~ +50°C  
 Relative Humidity: 95%
- Dimensions: 206mm × 95mm × 95mm

## Intelligent Linear Cable Heat Detector

- Fixed temperature linear cable heat detector
- Typically used to detect overheat in high power cable trays
- Configurable with single or dual detection cable
- Each detection cable - C-9106 up to 500 meters cable length
- Alarm condition shows cable distance location on fire panel
- Test button on the End of Line Unit - P-9106
- Electronically addressed

## Technical Specifications

- Operation Voltage: 24V Loop
- Operation Current:  
 Standby Current: 3mA  
 Alarm Current: 5mA
- Alarm temperature: optional 85°C or 105°C (specified by cable type).
- Operating Environment:  
 Temperature: -10 ~+80°C  
 Relative humidity: 95%
- Dimensions:  
 Interface 162mm x 200mm x 80mm  
 End of Line Unit 120mm x 80mm x 40mm



I-9602LW/LPG  
I-9602LW/NG  
I-9602LW/CG



I-9603(CO)

### Addressable Combustible Gas Detector

- Available for LPG, Natural Gas and Coal Gas (please specify at time of order)
- Built-in relay contacts for control of Gas Valves / Extract etc
- Built-in sounder with 2 stage alarm
- Manual reset and control (on/off) of relay contacts
- Electronically addressed
- Wall-mount (LPG) or ceiling mount (Natural Gas and Coal Gas)

### Technical Specifications

- Operating Voltage: 24V Loop, 24VDC Power Supply
- Operating Consumption (power supply): 1.5Watt
- Alarm Level: Pre-alarm: 12%LEL  
Urgent Alarm: 23%LEL
- Output: K1/K2, N/O contact, 3A/220VAC, active when pre-alarm  
V1/V2, 24VDC Pulse
- Operating Environment:  
Temperature: -10 ~+50°C  
Relative Humidity: 95%
- Wiring: Non-polarized 2-core for loop  
Non-polarized 2-core for 24VDC power supply
- Dimensions: 121mm x 87mm x 57mm

### Addressable CO Gas Detector

- Addressable CO detector suitable for car park and garage use
- Loop powered, maximum 80 units per loop
- Two stage alarm for two preset alarm levels
- Long life sensor, easy maintenance
- Electronically addressed
- Mounting plate provided

### Technical Specifications

- Operating Voltage: 24VDC
- Operating Current:  
Standby Current 2mA  
Action Current 2.5mA
- Alarm level  
Level 1: 25±10 ppm  
Level 2: 25±10 ppm
- Sensor life: >3 years
- Operating Environment:  
Temperature: -20~ +55°C  
Relative Humidity: 95%
- Dimension: 109mm x 109mm x 55mm



I-9314

### Intelligent Remote Indicator

- Can be program linked to any single or group of devices
- High intensity flashing LED in alarm condition
- Electronically addressed

### Technical Specifications

- Operating Voltage: 24VDC Loop
- Operating Current:
  - Monitoring Current: 0.8mA
  - Action Current: 16mA
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimensions: 120mm x 80mm x 49mm



C-9314P

### Remote Indicator

- Remote indicator for direct connection to detector via remote indicator terminals
- Compatible with Digital, Intelligent, Innovation and Conventional series Optical Smoke detectors and Dual Heat Detectors.

### Technical Specifications

- Operating Voltage: 2.0 - 3.0VDC
- Operating Current: <5mA
- Operating Environment:
  - Temperature: -10 ~+50°C
  - Relative Humidity: 95%
- Dimensions: 64.5mm x 64.5mm x 31.4mm



I-9401

### Addressable Sounder Beacon

- Addressable combined flashing high intensity LED beacon and sounder
- Two part plug-in construction with base mounted termination allowing easy installation and connection
- Electronically addressed

### Technical Specifications

- Operating Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
  - Loop: Standby Current 0.8mA, Alarm Current 6.0mA
  - Power Supply: Standby Current 10mA, Alarm Current 160mA
- Alarm Volume (SPL): 95dB @1 Metre
- Wiring: Non-polarized 2-core for loop  
Non-polarized 2-core for power supply
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimension: 144mm x 90mm x 57mm



I-9403



### Addressable Sounder And Strobe

- Two parts construction with base mounted termination allows easy installation
- Evacuate only or Alert/Evacuate mode can be set through handheld programmer
- Remote start input can be used to co-operation with other systems
- Strobe provided by high intensity LED cluster
- Electronically addressed
- LPCB Approved

### Technical Specifications

- Operation Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
  - Loop: Standby Current 1mA, Alarm Current 3mA
  - Power Supply: Standby Current 3mA, Alarm Current 65mA
- Sounder Output: 94dB @ 1 Metre
- Wiring: Non-polarized 2-core for loop  
Non-polarized 2-core for power supply
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimension: Diameter 110mm, Height 97.5mm



I-9404



C-94DB

### Addressable Sounder

- Identical in appearance and features to the I-9403 but without the strobe element

### Technical Specifications

- Operation Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
  - Loop: Standby Current 1mA, Alarm Current 5mA
  - Power Supply: Standby Current 3mA, Alarm Current 35mA
- Sounder Output: 94dB @ 1 Metre
- Wiring: Non-polarized 2-core for loop  
Non-polarized 2-core for power supply
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimension: Diameter 110mm, Height 97.5mm

### Deep Base

- Optional deep base for Sounder and Strobe (I-9403 / I-9404 / I-9407)
- For surface mount cable entry



I-9406

### Addressable Sounder Beacon Base

- Loop powered no additional cabling required
- Sound level 92dB/1m
- 16 programmable tones
- Early notification setting for sleeping areas
- Sandwich design
- Electronically addressed
- Can utilize same address as detector
- Easy plus installation

### Technical Specifications

- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 1mA
  - Action Current: 8-15mA
- Sound Output (SPL): 92dB @1 Metre
- Operating Environment:
  - Temperature -10 ~ +50°C
  - Relative Humidity 95%
- Dimension: Diameter 150mm, Height 42mm



I-9407

### Addressable Sounder And Strobe Loop Powered

- Two parts construction with base mounted termination allows easy installation
- Evacuate only or Alert/Evacuate mode can be set through handheld programmer
- Remote start input can be used to co-operation with other systems
- Strobe provided by high intensity LED cluster
- Electronically addressed

### Technical Specifications

- Operation Voltage: 24VDC Loop
- Operating Current:
  - Loop: Standby Current 1mA, Alarm Current 10mA
- Sounder Output: 94dB @ 1 Metre
- Wiring: Non-polarized 2-core
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimension: Diameter 110mm, Height 97.5mm





I-9300



I-9301



### Addressable Input Module

- Monitor switch contacts of remote equipment
- Loop powered
- Input programmable for NO or NC contacts (Programmable via P-9910B handheld programmer)
- 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
- Electronically addressed
- LPCB Approved

### Technical Specifications

- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 1mA
  - Action Current: 5mA
- Operating Environment:
  - Temperature: 0~+ 49°C
  - Relative Humidity: 93%
- Dimension: 120mm x 80mm x 39mm

### Intelligent Single Input /Output Module

- Addressable I/O with 24V / 3Amp relay output contacts
- Input can be configured as NO / NC or self confirmation of output (Programmable via P-9910 handheld programmer)
- 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
- Electronically addressed
- LPCB Approved

### Technical Specifications

- Operating Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
  - Loop: Standby Current 1mA, Alarm Current 3mA
  - Power Supply: Standby Current 2mA, Alarm Current 15mA
- Wiring: Non-polarized two-core for loop  
Non-polarized two-core for 24VDC power supply
- Operating Environment:
  - Temperature: 0~+ 49°C
  - Relative Humidity: 93%
- Dimension: 120 mm x 80mm x 39mm



DI-9301

### Intelligent Single Input /Output Module Loop Powered

- Addressable I/O with 24V /3Amp relay output contacts
- Input can be configured as NO / NC or self confirmation of output (Programmable via P-9910 handheld programmer)
- Two part plug-in construction with base mounted termination allows easy installation and connection
- Intelligent interface can be addressed and plugged into base at time of commissioning
- Electronically addressed

### Technical Specifications

- Operating Voltage: 24VDC Loop
- Operating Current:
  - Standby Current: 1mA
  - Action Current: 5mA
- Wiring: Non-polarized two-core for loop
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimension: 120 mm x 80mm x 40mm



I-9303



### Addressable Double I/O Module

- Addressable I/O with 24V / 3Amp relay output contacts with 2 independent circuits
- Input can be configured as NO / NC or self confirmation of output (Programmable via P-9910 handheld programmer)
- 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
- Electronically addressed

### Technical Specifications

- Operating Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
  - Loop: Standby Current 1mA, Alarm Current 4mA
  - Power Supply: Standby Current 4mA, Alarm Current 15mA
- Wiring: Non-polarized two-core for loop  
Non-polarized two-core for 24VDC power supply
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimension: 120 mm x 80mm x 43mm



I-9308

### Addressable Sounder Circuit Module

- Cost effective (cable saving) distributed addressable control of conventional sounder circuits
- Connects to conventional polarised 24VDC sounders/strobes
- Utilizes two addresses (one for Alert and one for Evacuate Control)
- Two part plug-in construction with base mounted termination allows easy installation and connection
- Electronically addressed
- Cable monitoring for fault of short circuit and open circuit

### Technical Specifications

- Operating Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
  - Loop: Standby Current 1.5mA, Alarm Current 4mA
  - Power Supply: Standby Current 10mA, Alarm Current 500mA max
- End of Line: 4.7k $\Omega$
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimensions: 120mm x 80mm x 43mm



DI-9309

### Addressable Multi-channel Interface

- Interface board for plant monitoring and control
- Multi channel integrated for savings installation cost
- Input cable fault monitored for short circuit and open circuit
- Ideal for monitoring of pump rooms
- Electronically addressed

### Technical Specifications

- Operating Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
  - Loop: Standby Current 1.5mA, Alarm Current 3mA
  - Power Supply: Standby Current 50mA, Alarm Current 100mA
- Capability: 1~16 input channels  
2 dry contact output channels
- Rate of Relay: 2A/220VAC
- End of Line: 4.7k $\Omega$  resistor
- Action Resistance: 470~680 $\Omega$
- Operating Environment:
  - Temperature: -10 ~ +50°C
  - Relative Humidity: 95%
- Dimension: 200mm x 100mm x 20mm



I-9319



C-9503



C-9504

### Addressable Zone Monitor Unit

- Interfaces with conventional fire detection equipment/panels etc
- Can connect up to 15 detectors with Active EOL or up to 25 detectors with Resistor EOL
- Ideal for integrating Sprinkler Zone Valve and Flow Switches
- Electronically addressed

### Technical Specifications

- Operating Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current (loop):
  - Loop: Standby Current 0.5mA, Alarm Current 5mA
  - Power Supply: Standby Current 10mA, Alarm Current 60mA
- Capability: 15 conventional detectors
- End of Line: 4.7k $\Omega$  resistor or AEOL
- Action Resistance: 470~680 $\Omega$
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimension: 120mm x 80mm x 43mm

### Short Circuit Isolator

- Isolates faulty part of the loop in the event of a short circuit
- Automatically reset once the fault has been cleared
- LED status indicator
- LPCB Approved

### Technical Specifications

- Operating Voltage: 24VDC
- Operating Current:
  - Monitor Current: 3mA
  - Action Current: 15mA
- Operating Environment:
  - Temperature: 0~+ 49°C
  - Relative Humidity: 93%
- Dimensions: 120mm x 80mm x 39mm

### Base Mount Short Circuit Isolator

- Replaces standard detector base (DZ-03)
- Cost effective installation without the need for additional cabling
- Features as per C-9503
- Base Type: Diameter 103mm, Height 20mm



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# **Intelligent** Fire Alarm Panels



GST100

### Addressable Mini Fire Panel

- Single loop addressable panel
- Can connect up to 128 addressable devices
- 8 zone fire and fault indication with consumer definable label
- Self configurable via panel keyboard
- Easy commissioning making the GST100 an ideal product for electrical installers

### Technical Specifications

- Power Supply: 230VAC 50/60Hz
- Operating Environment:
  - Temperature: 0~+ 40°C
  - Relative Humidity: 95%
- Dimension: 210mm x 300mm x 91mm



GST200-2



### Intelligent Fire Alarm Control Panel

- Approved by LPCB
- Two loop addressable fire detection panel packed with features not usually associated with smaller systems, providing a high quality solution at exceptionally good value.
- Loop capacity 477 intelligent devices
- 30 logical configurable zones
- PAS and Acknowledge Function
- Dirty Detector Reporting
- One Man Test Function
- Graphical LCD Display
- Zone indication and manual intervention panel
- Net-workable with all GST intelligent fire panels
- Programmable from PC
- Built-in RS485 repeater output (Maximum 10 repeaters)
- Optional GMC system
- Optional Fireman's Control Panel
- Optional Panel Printer
- Advanced user friendly programming software including 'Fuzzy Logic'

### Technical Specifications

- Standard: EN54 Part 2/4
- Approvals: LPCB, CE
- Main Input Voltage: 220 ± 10% VAC 50/60 Hz
- Input Current Rating: 0.500A
- System Operating Voltage: 24 VDC Nominal (20-27 VDC)
- Loop Capacity: Loop 1:235 ;loop 2:242(Address)
- Outputs (3):
  - Fire Alarm Output: 500mA /24Vdc/NO-NC
  - F.P.E. Output: 500mA /24Vdc/NO-NC
  - Sounder Circuit Output: 500mA /24Vdc/NO-NC
- Dimension: (HWD)
  - Outer: 580 x 420 x 30 mm
  - Inner: 550 x 393 x 173 mm



GST-IFP8



## Intelligent Fire Alarm Control Panel

- Approved by LPCB
- 8 x Loops (242) capacity (1936) addressable points
- Maximum 10 Loops Standalone
- Modular constructed for future expansion
- 40 x15 lines Colour Graphical LCD Display.
- Up to 999 programmable zones and 140 zone indication
- Auto Programming Day and Night Mode
- Enable and Disable function
- PAS and Acknowledge Function
- Dirty Detector Reporting
- Duplicate Address Checking
- Device Mismatch
- Walk Test Function with optional silent mode
- Can edit device detailed and programmed
- Programmable form PC or Panel
- History record-999 fire incident only and 999 event capacity in non-volatile memory Fully simulation of Cause and Effect
- Advanced user friendly programming software including 'Fuzzy Logic'.
- Networked with all GST Intelligent Fire panels up to 64 nodes, Optical Fiber Optic Network Interface
- Optional GST GMC graphic station
- Optional RS 485 mimic and repeater up to 64
- Optional GST GMC graphic station
- Built in Fire Alarm, FPE, Fault and Alarm Router output
- Panel Printer included
- Built in Battery charger

## Technical Specifications

- Standard: EN54 Part 2/4
- Approvals: LPCB
- Main Input Voltage: 220  $\pm$  10% VAC 50/60 Hz
- Input Current Rating: 1Ampere
- System Operating Voltage: 24 VDC Nominal (20-27 VDC)
- Loop Capacity: Loop 1-10 :242- Address per loop
- Zone Capacity: 999 Zones programmable
- Outputs (3):
  - Fire Routing: 200mA /24Vdc/4.7K $\Omega$  EOLR
  - F.P.E. Output: 500mA /24Vdc/4.7K $\Omega$  EOLR
  - Sounder Circuit Output: 1A /24Vdc/4.7K $\Omega$  EOLR
- Dimension: (HWD)
  - Outer: 850 x 484 x 185 mm
  - Inner: 804 x 440 x 150 mm



GST5000W/2or4



### Intelligent Fire Alarm Control Panel

Addressable fire detection with integrated controls providing the perfect solution for all medium sized projects

- Loop capacity 242 intelligent devices
- 40 × 12 characters Large Graphical LCD Display
- 60 zone indication and manual intervention panel
- Zone indication and manual intervention panel
- Net-workable with all GST fire panels
- Programmable from PC
- Built-in RS485 repeater output (Maximum 64 repeaters)
- Built-in Gas Extinguishing Control
- Integrated Security Alarm Facilities
- Optional Fireman's Control Panel
- Panel Printer included
- Optional GMC system
- Advanced user friendly programming software including 'Fuzzy Logic'
- GST5000/2 Two loop panel can connect up to 480 devices
- GST5000/4 Four loop panel can connect up to 750 devices

### Technical Specifications

- Power supply: 230VAC 50/60Hz
- Operating Environment:
  - Temperature: 0~+ 40°C
  - Relative Humidity: 95%
- Dimension: 506mm x 756mm x 170mm



GST5000/20/C  
GST5000/20/R



### Intelligent Modular 1-20 Loop Fire Alarm Control Panel

Fully modular and expandable fire command system, with multi loop and full integration with GST Voice Alarm System and Fire Telephone System, housed in either rack or console type housing provides the perfect solution for all medium to large systems.

- Loop capacity 240 intelligent devices (up to 4800 addressable points)
- 40 × 12 characters Large Graphical LCD Display
- 64 zone indication and manual intervention control expandable to 254 zone and plant overrides
- Net-workable with all GST fire panels
- Programmable from PC
- Built-in Gas Extinguishing Control
- Integrated Security Alarm Facilities
- Optional Fireman's Control Panel
- Panel Printer included
- Optional Colour Graphics
- Advanced user friendly programming software including 'Fuzzy Logic'
- Total integration with GST addressable Voice Alarm systems
- Order additional loop cards separately GST5000LC

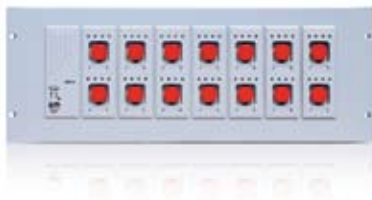
### Technical Specifications

- Power supply: 230VAC 50/60Hz
- Operating Environment:
  - Temperature: 0~+ 40°C
  - Relative Humidity: 95%
- Dimension: 580mm x 520mm x 1873mm (Rack type enclosure)  
1080mm x 1113mm x 1350mm (2 bay console)





P-9910B



GST-FCP14

FCP-M01  
FCP-Z02

### Handheld Programmer

- Portable programming tool for addressing and testing of intelligent devices
- Programs all loop devices (1-242)
- Programming of I2C protocol devices like Reflective Beam Detector and GST8903 Mimic Panel
- Interrogates device for Condition - Manufacturing Batch Number - Date of manufacture alarm sensitivity
- Re-program facility enables adjustment to alarm threshold of detectors
- Able to switch on or off the rate of rise function of dual heat detector (I-9103)
- Adjusts input modules to accept N/C or N/O contacts.
- Dimensions: 164mm x 64mm x 24mm

### Fireman's Control Panel

- CPU controlled switches with addressable and direct outputs
- Ideal for controlling of smoke vents, AHUs, exhaust fans, smoke curtains, etc.
- Single confirmation
- Overrides cause and effects

### Components for FCP-014

- For building fireman's switch on wall mount panels
- Ideal for controlling of AHUs, exhaust fans, smoke curtains, etc.
- Overrides cause and effects



GST852RP



### LCD Passive Repeater Panel

- Aesthetically pleasing design with large LCD display
- Compatible with all GST intelligent fire alarm panels
- Back lit LCD displaying all fire information
- Local sounder mute and scroll alarms buttons
- Two part plug-in construction with base mounted termination allows easy installation and connection
- Repeater can be plugged in to base at time of commissioning

### Technical Specifications

- Operation Voltage: 24VDC
- Standby Power: 2W
- Maximum Power: 5W
- Operation Environment:
  - Temperature: 0~+ 40°C
  - Relative Humidity: 95%
- Dimension: 234mm x 104mm x 35mm



GST-NRP01

### Network Repeater Panel

- Provides remote control of system
- Password protect access levels
- Flush-mount or Surface-mount structure
- Functional control of network panels

### Technical Specifications

- Operation Voltage: 24VDC
- Standby Power: 2W
- Maximum Power: 5W
- Operation Environment:
  - Temperature 0~+ 40°C
  - Relative Humidity 95%
- Dimension: 390mm x 270mm x 100mm



GSTGMC

### Graphic Monitor Centre

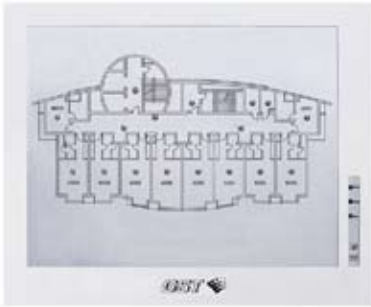
- Colour graphic control and display system, providing a complete window on the fire detection systems and ancillary equipment
- Compatible with all GST intelligent fire panels
- Multi-level password control for convenient system management
- PC not included



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# Custom Panels



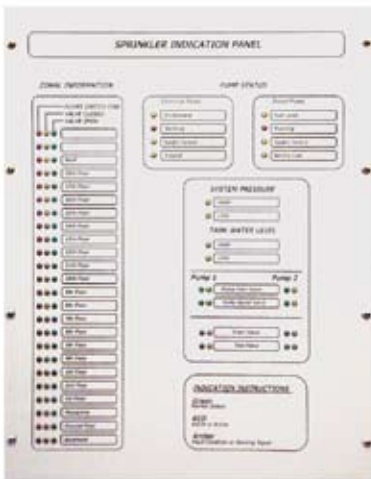
GST8903

### Graphic Mimic Panel

- Graphic repeater panel for GST fire alarm systems, compatible with all GST intelligent fire alarm panels
- Up to 100 LED indication points
- Custom Graphical layout to project requirement.
- Electronically Programmed by handheld programmer
- Programmable to display zones or individual device
- Programmable to indicate Fire and Fault conditions
- A3, A2, A1 and A0 sizes

### Technical Specifications

- Operation Voltage: 24VDC
- Standby Current: 25mA
- Active Current: 100mA
- LED Capacity: 100
- Operation Environment:
  - Temperature: 0~+ 40°C
  - Relative Humidity: 0 ~ 95%



GST-SIP

### Sprinkler Monitoring and Indication Panel

- Custom indication panel fully integrated with fire alarm system
- Zonal valve, flow switch, pump status and water tank level etc indicated clearly by individual LEDs
- Front facial layout custom manufactured according to project requirements
- Riser diagram layout available

### Technical Specifications

- Operation Voltage: 24VDC
- Standby Current: 25mA
- Active Current: 100mA
- LED Capacity: 100
- Operation Environment:
  - Temperature: 0~+ 40°C
  - Relative Humidity: 0 ~ 95%



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# Power Supply



PSU24-5  
PSU24-5A  
PSU24-10  
PSU24-10A

### Power Supply Unit

- 24 volt DC intelligent PSU, 5 ampere and 10 ampere version
- Digital display showing output voltage and load current
- Fully monitored with output protection
- Addressable intelligence for monitoring and reporting to main fire alarm panel (PSU24-5A & PSU24-10A)



PSU24-15  
PSU24-30  
PSU24-45  
PSU24-60

### Power Supply Unit

- 24 volt DC PSU's for heavy load applications
- Battery capacity monitored and displayed
- Boost charge function available
- Fully monitored
- Input and output protection
- DC power ratings: 15A, 30A, 45A and 60A models



A UTC Fire & Security Company

# Innovation **Conventional** Devices

The Innovation range of detectors are setting a new standard in conventional detection by utilizing our expertise in intelligent fire detection. We now offer unrivaled features such as:

- Linear Drift Compensation
- Algorithm maps for faster response and false alarm rejection
- Blinking LED



DC-9102



### Innovative Conventional Optical Smoke Detector

- Algorithm maps for faster response and false alarm rejection
- Intelligent drift compensation
- Sensing chamber for exceptional dust proof ability and LED for 360° vision
- Built in remote indicator output
- Unique low profile design
- EN54 compliance

### Technical Specifications

- Standard: EN54-part7
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 0.06mA
  - Alarm Current: 55mA
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm; Height 44.5mm



DC-9103



### Innovative Conventional Dual Heat Detector

- Combined fixed temperature and rate of rise heat detection
- LED for 360° vision
- Built in remote indicator output
- Unique low profile design
- EN54 compliance

### Technical Specifications

- Standard: EN54-part5
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 0.06mA
  - Alarm Current: 55mA
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Detector Class: A1R, A2R, BR, A1S, A2S, BS
- Dimensions: Diameter 100mm, Height 41mm





DC-9101

### Innovative Multi Sensor

- Combined all the features of the DC-9102 Optical and the DC-9103 Heat detector
- LED for 360° vision
- Sensing chamber for exceptional dust proof ability
- Ideal alternative to Ionization detector
- Low profile design

### Technical Specifications

- Standard: EN54-part 5, part 6 and part 7
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 0.06mA
  - Alarm Current: 55mA
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 44.5mm



DB-01D

### Diode Base

- Diode base for DC range of conventional detectors
- For use with DP-9907 Active End of Line



DP-9907

### Active End of Line

- Active End of Line for conventional fire detection zones
- It can be used as conventional detector base or work independent with a cover
- Provides detector removal indication while still enabling alarms down stream of the missing device to be detected
- Compatible with all GST conventional panels
- Compatible with addressable zone interface I-9319



DC-9204



D-92FC



D-92WPB

### Innovative Conventional Manual Call Point

- Re-settable (non-breaking glass) via special key
- Easy 1st and 2nd fix installation
- Semi-flush or surface mount installation
- Optional back-box for surface mount
- Pleasing style design
- LPCB Approved

### Technical Specifications

- Protection Rating: IP55
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 0
  - Alarm Current: 30mA
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Contact Resistance: 100mΩ
- Application: Indoor use
- Dimensions: 87 x 87 x 58 mm, Surface Mount  
87 x 87 x 23.5 mm, Recess Mount

### Protective Flip Cover

- Protects manual call point from accidental activation
- Meets requirement of '2 step operation' in consultant specifications
- Suitable for manual call points DI-9204 and DC-9204

### Weather Proof Box

- IP65 protective enclosure for manual call points
- Large internal space enough for most types of MCP
- Dimensions: 110mm x 119mm x 44.5mm



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# **Conventional** Fire Alarm Devices



C-9102



### Conventional Optical Smoke Detector

- Aesthetically pleasing low profile design
- Twin LED for 360° vision
- Removable optical chamber for easy cleaning and maintenance
- With remote indicator output
- LPCB Approval

### Technical Specifications

- Standard: EN54-part7
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 0.06mA
  - Alarm Current: 30mA
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 50mm



C-9103



### Conventional Dual Heat Detector

- Fixed Temperature and Rate of Rise Heat Detection
- Aesthetically pleasing low profile design
- 8 bit intelligent processor
- Twin LED for 360° vision
- With remote indicator output
- LPCB Approval

### Technical Specifications

- Standard: EN54-part5
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 0.06mA
  - Alarm Current: 30mA
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 50mm



C-9101



### Conventional Multi Sensor

- Combined all the features of the C-9102 Optical and the C-9103 Heat detector
- LED for 360° vision
- Sensing chamber for exceptional dust proof ability
- Ideal alternative to Ionization detector
- Low profile design

### Technical Specifications

- Standard: EN54-part 5, part 6 and part 7
- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 0.06mA
  - Alarm Current: 30mA
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Field Programmable Sensitivity: 0.102dB/m ~ 0.316B/m-3 levels
- Dimensions: Diameter 100mm, Height 44.5mm



C-9104

### Conventional Ultraviolet Flame Detector

- Ultraviolet Sensor that detects the UV rays emitted by a flame
- Aesthetically pleasing low profile design
- Dust / corrosion / humidity resistant
- Standard calibration set to detect a 3cm flame at 6 metres
- Effective range 12 metres

### Technical Specifications

- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 1.2mA
  - Alarm Current: 30mA
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Detection Angle: 80°
- Dimensions: Diameter 100mm, Height 41mm



R-6601



### 4-wire Conventional Smoke Detector

- Two of output contacts, open circuit when operating; contacts closed and self-lock when alarming
- New scattering technology
- Unique labyrinth design protect against insect, dust, light infiltration

### Technical Specifications

- Operating Voltage: 12VDC
- Operating Current:
  - Standby Current: 1mA
  - Alarm Current: 20mA
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 56mm



R-6602



### 4-wire Conventional Heat Detector

- Two of output contacts, open circuit when operating; contacts closed and self-lock when alarming
- Built-in single chip microcomputer for real time data sampling and processing
- Fixed temperature alarm

### Technical Specifications

- Operating Voltage: 12VDC
- Operating Current:
  - Standby Current: 1mA
  - Alarm Current: 20mA
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 58mm



S-9102



### Smoke Alarm (Battery Optical Smoke Detector)

- Self contained optical smoke detector and alarm sounder
- Easy installation
- Test/Reset Button
- Low battery indication
- Battery removal will inhibit cover from closing (as per UL standards)
- Low sensitivity alert
- Connection port to link up to 30 detectors in a single system
- Output to interface with other security equipment

### Technical Specifications

- Power Supply: PP3 DC9V battery, lasting 1+ year
- Sounder Output: 80dB @ 1 Metre
- Operating Environment:
  - Temperature: -10~+ 50°C
  - Relative Humidity: 95%
- Dimension: Diameter 140mm, Height 54mm (with base)



DZ-03

### Standard Detector Base

- Fixing and terminating of conventional detectors with directional gaps
- Compatible with GST conventional detectors using 4.7kΩ, resistor end of line (EOLR)
- Common base for C-9101 / 2 / 3 / 4



DZ-03D

### Diode Base

- Diode base version for conventional detectors utilising P-9907 active end of line (AEOL)
- Common base for C-9101 / 2 / 3 / 4



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

### Conventional Combustible Gas Detector

- Available for LPG, Natural Gas and Coal Gas (please specify at time of order)
- Built-in relay contacts for control of Gas Valves / Extract etc
- Built-in sounder with 2 stage alarm
- Manual reset and control (on/off) of relay contacts

### Technical Specifications

- Operating Voltage: 220VAC
- Operating Consumption: 3Watt
- Alarm Level: Pre-alarm 12%LEL  
Urgent Alarm 23%LEL
- Output: K1/K2, N/O contact, 3A/220VAC, active when pre-alarm  
V1/V2, 12VDC Pulse
- Operating Environment:  
Temperature: -10~+50°C  
Relative Humidity: 95%
- Wiring: 2-core AC power supply



C-9202



### Conventional Manual Call Point

- Compatible with latest EN standards
- Non-breaking re-settable glass (via special key)
- Two part plug-in construction with base mounted termination allows easy installation and connection

### Technical Specifications

- Operating Voltage: 24VDC
- Operating Current:  
Standby Current: 0  
Alarm Current: 30mA
- N/O Output Contact: Rating 60VDC, 0.1A
- Contact Resistance 100mΩ
- Operating Environment:  
Temperature: -10~+50°C  
Relative Humidity: 95%
- Dimensions: 95mm x 98mm x 40mm





C-9401

### Conventional Sounder Beacon

- Conventional combined flashing high intensity LED beacon and sounder
- Two part plug-in construction with base mounted termination allowing easy installation and connection

### Technical Specifications

- Operating Voltage: 24VDC
- Operating Current:
  - Standby Current: 0mA
  - Alarm Current: 160mA
- Alarm Volume (SPL): 95dB @1 Metre
- Wiring: 2-core polarized
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimension: 144mm x 90mm x 57mm



C-9403

### Conventional Sounder and Strobe

- Two parts construction with base mounted termination allows easy installation
- Strobe provided by high intensity LED cluster

### Technical Specifications

- Operation Voltage: 24VDC
- Operating Current:
  - Standby Current: 0mA
  - Alarm Current: 50mA
- Sounder Output: 94dB @ 1 Metre
- Wiring: 2-core polarized
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimension: Diameter 110mm, Height 97.5mm





C-9404



C-94DB

### Conventional Sounder

- Identical in appearance and features to the C-9403 but without the strobe element

### Technical Specifications

- Operation Voltage: 24VDC
- Operating Current:
  - Standby Current: 0mA
  - Alarm Current: 35mA
- Sounder Output: 94dB @ 1 Metre
- Wiring: 2-core polarized
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimension: Diameter 110mm, Height 97.5mm

### Deep Base

- Optional deep base for Sounder and Strobe (C-9403 / C-9404)
- For surface mount cable entry



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A UTC Fire & Security Company

# **Conventional** Fire Alarm Panels



GST101



GST102



GST104



GST108



GST116



## Conventional Fire Alarm Panels

- LPCB Approved
- 1/2/4/8/16 zone conventional fire alarm panels
- Both End of Line Resistor and Active End of Line can be used
- Day/night mode selected (not valid for GST101&GST102)
- Zone isolate control
- Key-control evacuation over-ride
- Repeater output available
- Fire alarm output for remote alarm
- Class change terminal for remote control
- Active EOL enables multiple alarm reporting from same zone
- Active EOL max 15 fire detectors and infinite manual buttons each zone
- Resistor EOL up to 25 detectors and infinite manual buttons each zone
- Optional relay output board

## Technical Specifications

- Standard: EN54 Part 2 / 4
- Approvals: LPCB , CE
- Power Supply: 230VAC 50/60Hz
- Operating Environment:
  - Temperature: 0~+40°C
  - Relative Humidity: 95%
- Dimension 210mm x297mm x 90mm



GST101S

### Conventional Fire Alarm Control Panel

- Single zone conventional fire panel
- Compact design
- Suitable for both Active and resistor end of line monitoring.
- Similar features as standard GST101



RB1XX Series

### Relay Board

- Accessory of conventional fire alarm control panels
- Relay board for additional fire and fault signal outputs

Part Number	RB102	RB104	RB108	RB116
Compatible Panel	GST102	GST104	GST108	GST116
Outputs	Fire Output 2	Fire Output 4	Fire Output 8	Fire Output 16
	Fault Output 2	Fault Output 4	Fault Output 8	Fault Output 16
Contact Capability	24VDC/1A	24VDC/1A	24VDC/1A	24VDC/1A



P-9907



GST-RP16

GST-101  
GST-102  
GST-104  
GST-108  
GST-116

### Active End of Line

- Active End of Line for conventional fire detection zones
- It can be used as conventional detector base or work independent with a cover
- Provides detector removal indication while still enabling alarms down stream of the missing device to be detected
- Compatible with all GST conventional panels
- Compatible with addressable zone interface I-9319
- Compatible with C-9101/2/3/4
- Dimension: Diameter 103mm, Height 37.4mm

### 16 Zone Conventional Repeater Panel

- Compatible with GST102/4/8/16
- Powered from FACP directly
- Zonal Fire and general Fault indication
- Dimension: 280mm x 110mm x 46mm

### Revised Conventional Fire Panel

- Pleasing colour and fascia design
- Re-arranged indication and operation panel
- Simplified user operation
- Comply to latest EN54 standard
- Pending panel under development



A UTC Fire & Security Company

# Gas Extinguishing System



GST-301

### Conventional Gas Extinguishing Control Panel

- Two plus one control panel
- Standalone gas extinguishing control panel
- 2 conventional detection zones achieve double knock control
- Additional standard fire detection zone for other areas (no effect on gas release)
- Automatic and Manual extinguishing control
- Numerical onboard timer control
- Adjustable gas release delay timer
- Duty and Standby Cylinder control
- Two phase evacuation sounders
- Adjustable Solenoid Pulsed output
- Compatible with all GST conventional detectors
- Fully compliant to BS/EN/CE standards
- Built-in PSU and Charger



GST-303/306

### Addressable Gas Extinguishing Control Panel

- Compatible with all GST Intelligent Fire Alarm Control Panels
- Sits directly on addressable loop
- Direct intelligent control via addressable Loop
- Capable of controlling up to 6 zones of extinguishing
- Auto and manual control facilities
- Utilises GST intelligent detectors and programming (inc Fuzzy Logic) for control
- Fully monitored status control
- Requires 24VDC Power supply





C-9317



C-9318



C-9329

### Emergency Start/Abort Switch

- Emergency Start/Abort switch for gas extinguishing control
- Compatible with GST301/303/306 gas extinguishing control panels

### Gas Extinguishing Warning Indicator

- Normally installed above the entrance to a gas extinguishing control area
- Will eliminate and activate sounder prior to gas release

### Interposing Relay Module

- Compatible with GST303/306
- Monitoring cable from gas panel to module
- Apply power to solenoid valve for gas release initiation
- Confirmation signal of pressure switch when activated



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# **Fire Telephone** System



GST-FT8WN

### Fire Telephone Panel

- 8 Zone conventional fire telephone center
- 2-way voice communication
- Networkable up to 8 Fire Telephone panels
- Call divert to the main panel
- Operator can select single or group call
- Operator can ring outstations and fixed handsets
- Call panel to panel
- Up to 10 communication points can be connected to each zone using socket jack
- Network cable monitored
- Communication line monitored
- Wall mounted

### Technical Specifications

- Operating Voltage: 24VDC
- Standby Current: 150mA
- Maximum Alarm Current: 750mA
- Operating Environment:
  - Temperature 0~+ 40°C
  - Relative Humidity 95%
- Dimension: 400mm x 280mm x 100mm



GST-FT24N

### Fire Telephone Panel

- 24 Zone addressable fire telephone center
- 2-way voice communication
- Networkable up to 8 Fire Telephone panels
- Call divert to the main panel
- Automatic record of conversation
- Operator can select single or group call
- Operator can ring outstations and fixed handsets
- Call panel to panel
- Up to 10 communication points can be connected to each zone using socket jack
- Network cable monitored
- Communication line monitored
- 19"/3U standard rack mount

### Technical Specifications

- Operating Voltage: 24VDC
- Standby Current: 200mA
- Maximum Alarm Current: 1 Amphere
- Operating Environment:
  - Temperature 0~+ 40°C
  - Relative Humidity 95%
- Dimension: 482.5mm x 132.5mm x 225mm



P-9911(S)



P-9911(F)



P-9911(J)



P-9911(M)

### Speaker Fire Telephone Outstation

- Hand-free extension of Fire Telephone System
- Compatible with all GST conventional fire telephone handsets in same zone
- Dimension: 172mm x 106mm x 70mm

### Fixed Fire Telephone Handset

- Fixed extension of Fire Telephone System
- Open box and lift receiver to communicate with central control
- Compatible with all GST conventional fire telephone handsets in same zone
- Dimension: 234mm x 146mm x 60mm

### Fire Telephone Jack Socket

- Simply insert mobile handset into jack to establish communications with the control centre
- Compatible with all GST conventional fire telephone handsets in same zone
- Dimension: 85mm x 85mm x 12mm

### Fire Telephone Mobile Handset

- Mobile handset compatible with GST fire telephone jacks
- Dimension: 210mm x 50mm x 50mm



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# **Explosion Proof** Products



C-9101(EX)

### Intrinsically Safe Combination Heat/Photoelectric Smoke Detector

- Drift compensation suits environment changing extensively
- Integrated algorithm for analyzing fire, improving the sensitivity highly
- Self-diagnostic
- Removable innovative sensing chamber, easy for maintenance

### Technical Specifications

- Operating Voltage: 24VDC (16VDC~28VDC)
- Standby Current: 60  $\mu$ A
- Alarm Current: 10mA~30mA
- Action Temperature: 58°C
- Wiring: Polarized two-wire for power
- Ingress Protection Rating: IP22
- Environment Temperature: -10~+50°C
- Relative Humidity: 95%, non condensing
- Dimensions: Diameter 100mm; Height 56mm (with base)
- Explosion-proof Mark: ExibIICT6



C-9103(EX)

### Intrinsically Safe Conventional Rate of Rise and Fixed Temperature Heat Detector

- Rate of rise and fixed temperature alarm modes
- Twin LED for 360° view
- Built-in microprocessor selects and processes data in real time
- Designed to comply with EN 54-5 standard

### Technical Specifications

- Operating Voltage: 24VDC (16VDC~28VDC)
- Standby Current: 60  $\mu$ A
- Alarm Current: 10mA~30mA
- Action Temperature: 58°C
- Wiring: Polarized 2-core for detection zone cable
- Ingress Protection Rating: IP33
- Environment Temperature: -10~+50°C
- Relative Humidity: 95%, non condensing
- Dimensions: Diameter 100mm; Height 58mm (with base)
- Explosion-proof Mark: ExibIICT6



C-9403(EX)

### Intrinsically Safe Conventional Sounder Beacon

- High intensity red LED flashing beacon
- Sound output 92dB at 1 meter
- 2 part construction for easy installation

### Technical Specifications

- Operating Voltage: Power Action: 24VDC (16V~28V)
- Power Action Current: 50mA
- Ingress Protection Rating: IP33
- Environment Temperature: -10~+50°C
- Relative Humidity: 95%, non condensing
- Explosion-proof Mark: ExibIICT6



C-9404(EX)

### Intrinsically Safe Conventional Sounder

- Sound output 92dB at 1 meter
- 2 part construction for easy installation

### Technical Specifications

- Operating Voltage: Power Action: 24VDC (16V~28V)
- Power Action Current: 35mA
- Ingress Protection Rating: IP33
- Environment Temperature: -10~+50°C
- Relative Humidity: 95%, non condensing
- Explosion-proof Mark: ExibIICT6



C-9201(EX)



DI-9204Exd

### Intrinsically Safe Manual Call Point

- Re settable non-breaking glass

### Technical Specifications

- Operating Voltage: 24VDC (16VDC~28VDC)
- Standby Current: 0mA
- Alarm Current: 10-30mA
- Wiring: Two wire
- Ingress Protection Rating: IP40
- Environment Temperature: -20~+40°C
- Relative Humidity: 95%, non condensing
- Dimensions: 90mm x 122mm x 48.5mm
- Explosion-proof Mark: ExibIICT6

### Explosion Proof MCP

- Built-in 8-bit microprocessor control
- Electronically addressed by handheld programmer
- Non break-glass type, resetable by special key
- With wide temperature range, high ingress protection rating, the MCP can apply to vessels, outdoors and explosive hazardous environment

### Technical Specifications

- Operating Voltage: Loop 24V
- Operating Current:
  - Standby Current: 0.8mA
  - Alarm Current: 2mA
- Operating Environment:
  - Temperature: -40~+70°C
  - Relative Humidity: 95%
- Dimension: 196mm x 129mm x 95mm
- Ex Mark: ExibIIBT6/DIP A20 TA, T6
- Ex Certificate No.: CE061028





DI-9104Exd

### Digital Flame Proof UV Flame Detector

- Built-in single chip microcomputer for signal processing and intelligent communication control
- Intelligent algorithm for fast alarm, response and superior false alarm rejection
- Connect directly to GST addressable loop, compatible with all GST intelligent panels
- Three (3) sensitivity levels
- High sensitivity and reliable performance, dust/corrosion/humidity resistant
- Adapted to explosive area 1 & 2

### Technical Specifications

- Operating Voltage: 24V
- Operating Current:
  - Standby Current: 2mA
  - Alarm Current: 2.5mA
- Operating Environment:
  - Temperature: -20~+40°C
  - Relative Humidity: 95%
- Dimension: 147mm x 103mm x 92mm
- Ex Mark: ExibIICT6
- Ex Certificate No.: CE061027



DC-9104Exd

### Innovation Flame Proof UV Flame Detector

- Built-in single chip microcomputer, intelligent algorithm for fast alarm response (up to 100ms) high level of false alarm rejection
- Normally open output for easy interfacing
- Advanced ultraviolet photodiode for superior sensitivity, reliable performance, dust / humidity / corrosion resistant
- Stylish pleasing design with aluminum alloy shell, small volume and light weight for better mechanical strength

### Technical Specifications

- Operating Voltage: 24V
- Operating Current:
  - Standby Current: 2.5mA
  - Alarm Current: 15mA
- Operating Environment:
  - Temperature: -20~+40°C
  - Relative Humidity: 95%
- Dimension: 147mm x 103mm x 92mm
- Ex Mark: ExibIICT6
- Ex Certificate No.: CE061028



D-9105(EX)

### Digital Flame Proof Reflective Beam Detector

- Integration of the emitting and receiving part makes for easy installation and accurate optical pathway
- Built-in microprocessor enables intelligent judgement of fire alarm and fault
- Easy alignment ensures a single person installation
- Self-diagnostic
- Drift-compensation for factors weakness, such as dust contamination, positional excursion and component ageing
- Integrated functions for both addressable and conventional use
- Electrically address by handheld programmer
- Fire and fault volt-free contact output for Integration of the system
- 3 sensitivity levels can be set by programmer
- SMT processing technology

### Technical Specifications

- Operating Voltage: 24V
- Operating Current:
  - Power: Commission Current 20mA
  - Standby Current 12mA
  - Alarm Current 22mA
  - Loop: 2mA
- Operating Environment:
  - Temperature: -20~+40°C
  - Relative Humidity: 95%
- Dimension: 344mm x 240mm x 212mm
- Ex Mark: ExibIICT6/ DIP A21 TA, T6
- Ex Certificate No.: CNEEx 06.0273



D-9107RExd

### Digital Flame Proof Dual IR Flame Detector

- Dual band Infrared flame detection
- Immune to sunlight, artificial light, heat radiation, providing a means of reliable operation
- Integrated functions of both addressable and conventional
- Electronically address by handheld programmer
- Suitable for civil applications & hazardous industrial locations such as Zone 1, Zone 2 in explosive environment and Zone 21 and Zone 22 in flammable dust atmosphere

### Technical Specifications

- Operating Voltage: 24V
- Operating Current:
  - Standby Current: 2mA
  - Alarm Current: 4mA
- Operating Environment:
  - Temperature: -20~+55°C
  - Relative Humidity: 95%
- Dimension: 166mm x 235mm x 199mm (with frame)
- Ex Mark: ExibIICT6/DIP A21 TA, T6
- Ex Certificate No.: CNEEx 06.0273



I-9332

### Flame Proof Zone Monitor Interface

- Connecting Intrinsically Safe Detectors and MCP into GST intelligent system
- Electronically addressed
- Energy limited to ensure the safety system operation
- Zener Barrier inside

### Technical Specifications

- Loop Voltage: 24V
- Power Supply Voltage: 24VDC
- Operating Current:
  - Standby Current: 0.5mA
  - Alarm Current: 5mA
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimensions: 201mm x 172mm x 79mm



I-9333

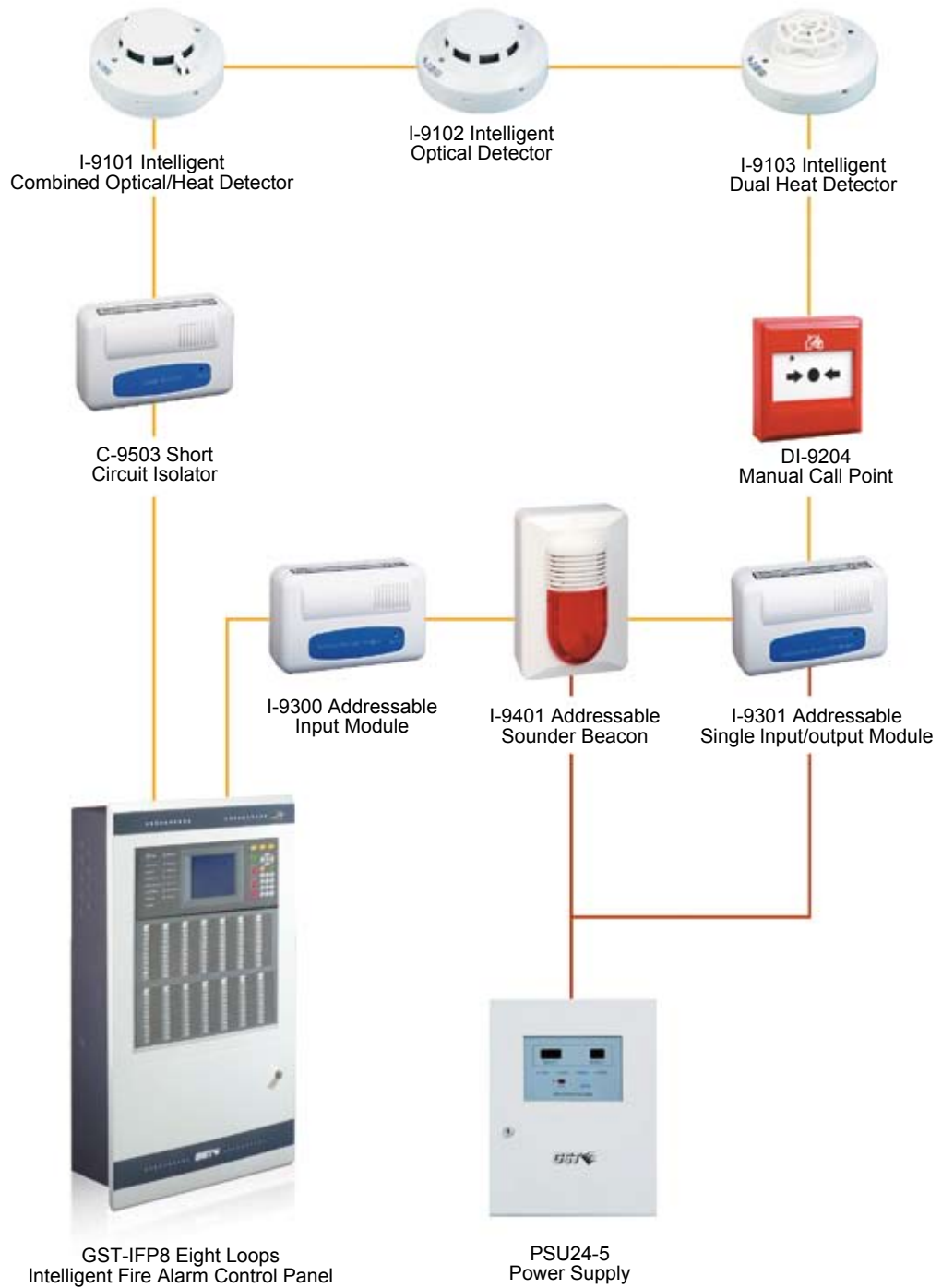
### Flame Proof Sounder Control Interface

- Connecting Intrinsically Safe Sounder into GST intelligent system
- Activating notification in hazardous area in case of fire condition
- Electronically addressed
- Energy limited to ensure the safety system operation
- Zener Barrier inside

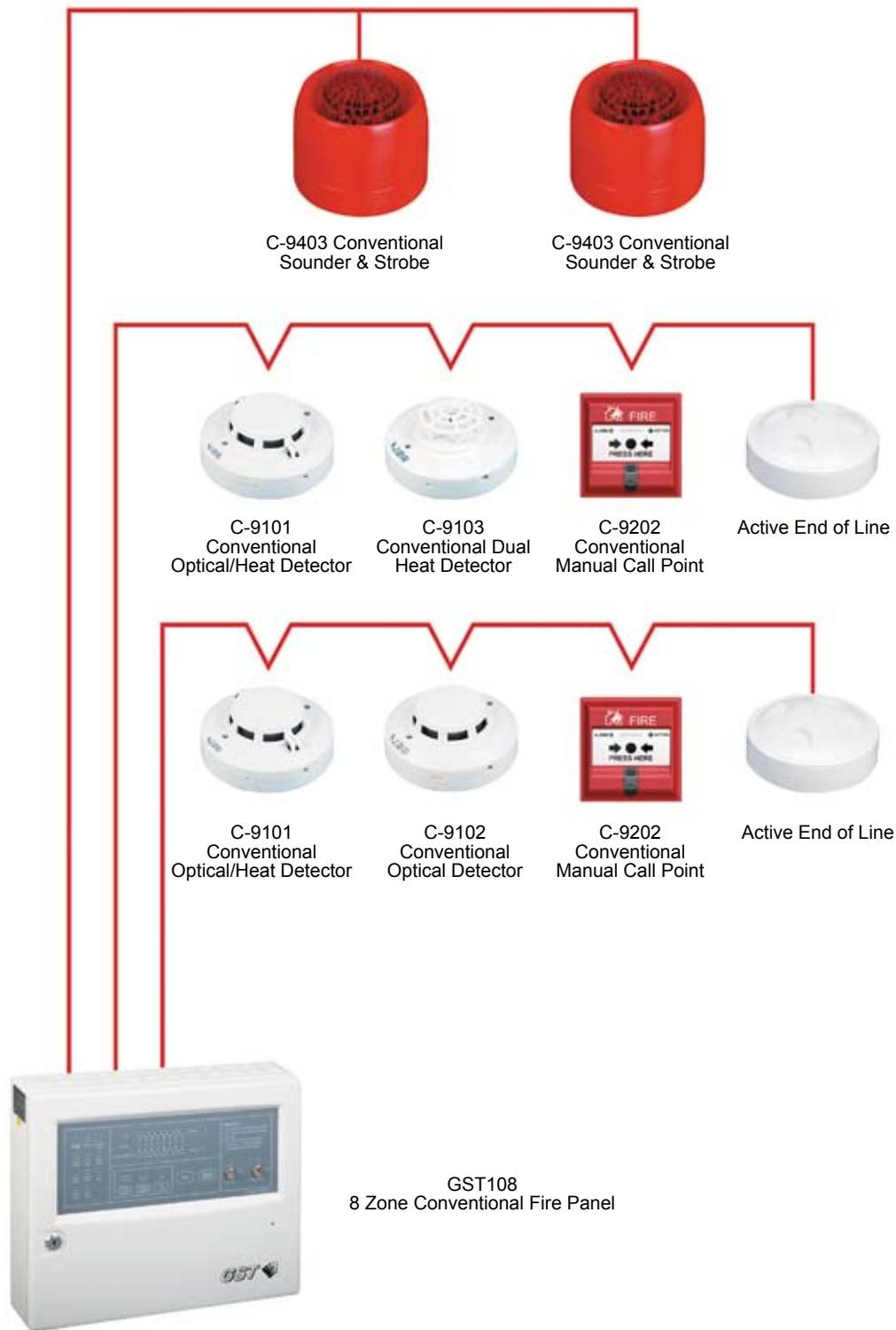
### Technical Specifications

- Loop Voltage: 24V
- Power Supply Voltage: 24VDC
- Operating Current:
  - Standby Current: 0.5mA
  - Alarm Current: 50mA
- Operating Environment:
  - Temperature: -10~+50°C
  - Relative Humidity: 95%
- Dimensions: 201mm x 172mm x 79mm

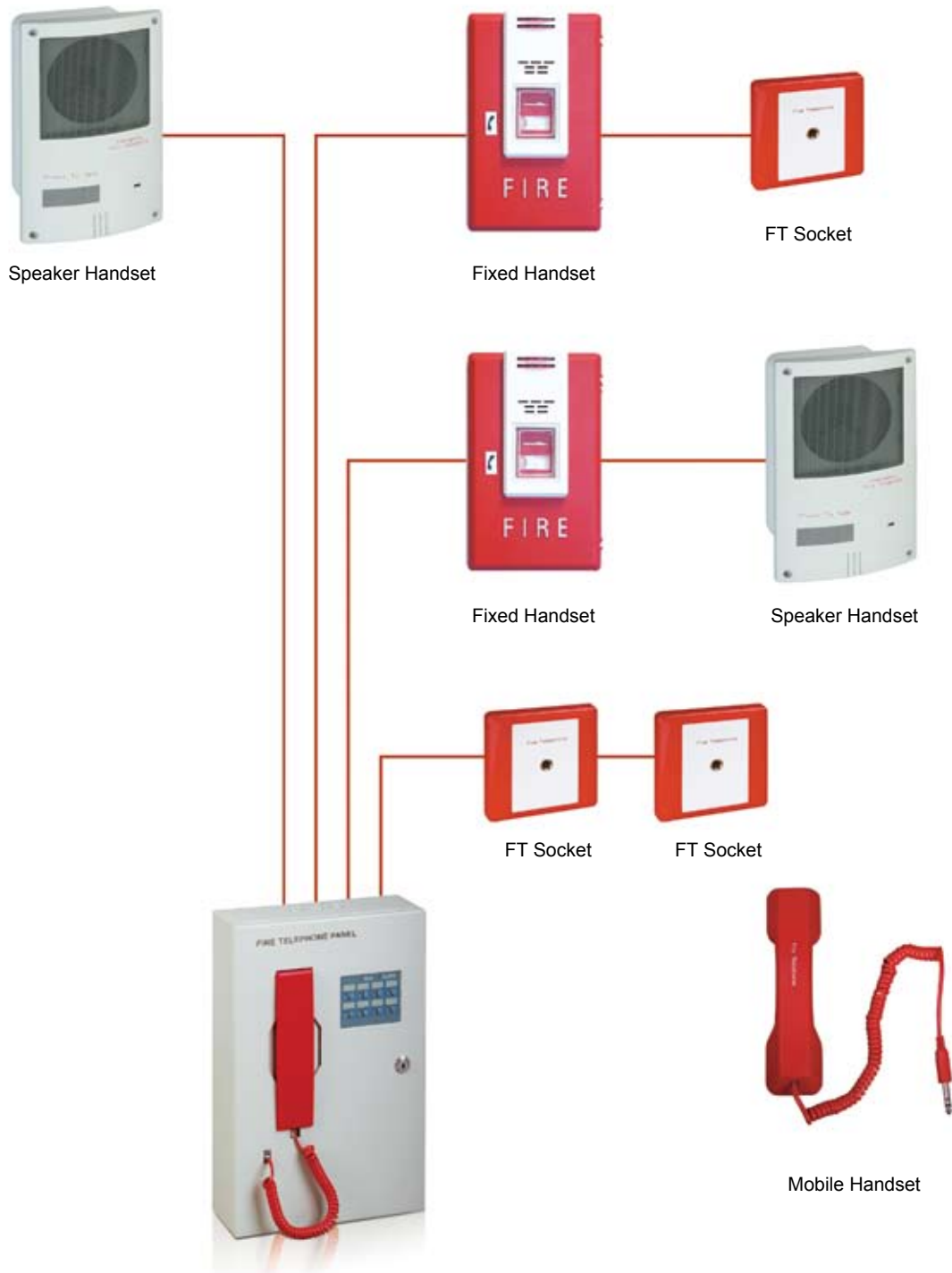
## Intelligent Fire Alarm System



# Conventional Fire Alarm System

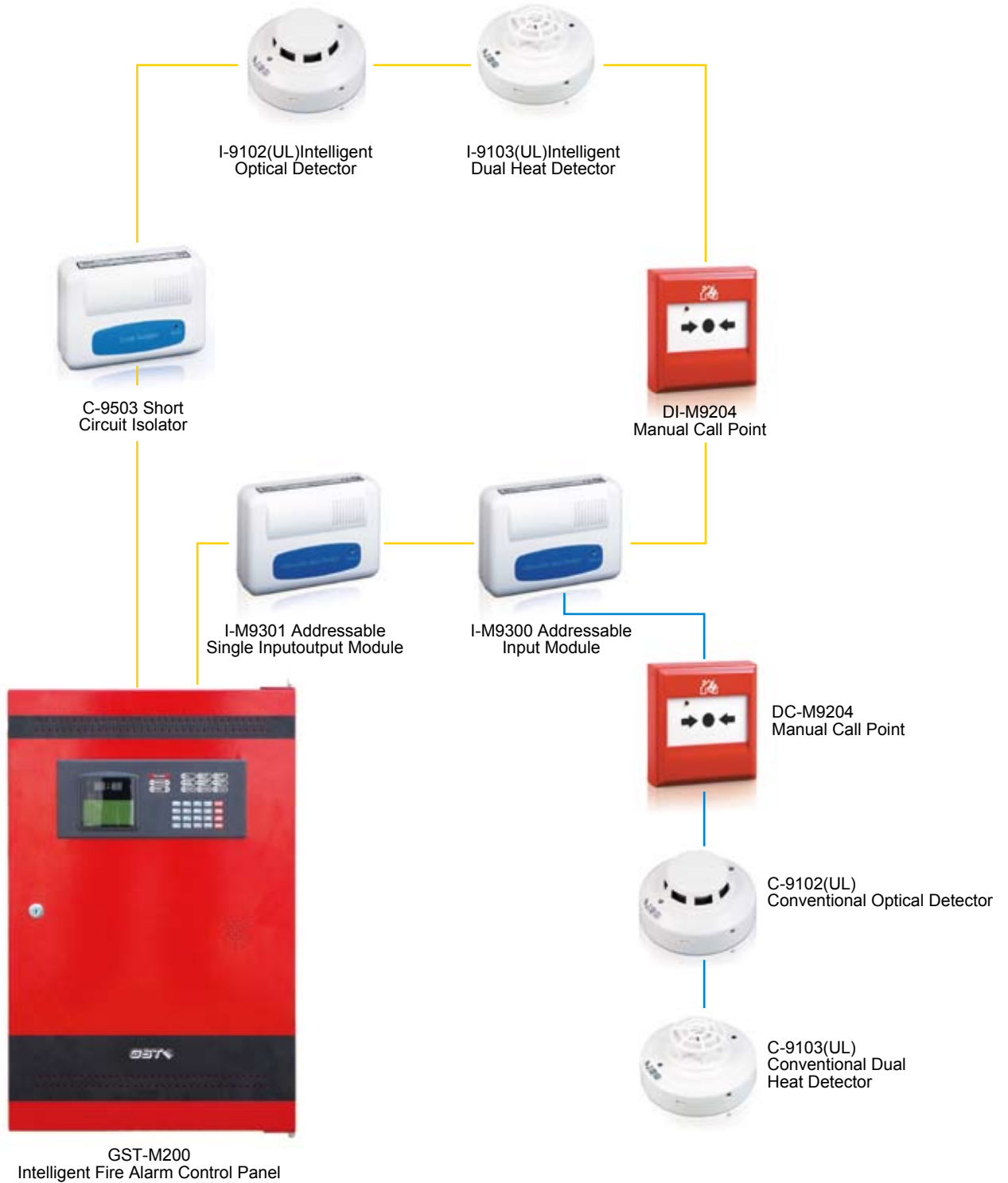


## Fire Telephone System



8 Zone Conventional Fire Telephone Panel

# UL Listed Fire Alarm Diagram





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