

Fire Alarm System

The Intelligent Solution

Ver. 2014.5



Overview of UTC Building & Industrial Systems

UTC Building & Industrial Systems is the world's largest provider of building technologies. Its elevator, escalator, fire safety, security, building automation, heating, ventilation, air conditioning and refrigeration systems and services promote integrated, high performance buildings that are safer, smarter and sustainable. UTC Building & Industrial Systems is a unit of United Technologies Corp., a leading provider to the aerospace and building systems industries worldwide.

Overview of Gulf Security Technology Co., Ltd. (GST)

GST is a primary fire alarm & detecting system and smart home system provider in China. Founded in 1993, GST has become one of the leading brands in term of market share in local market.

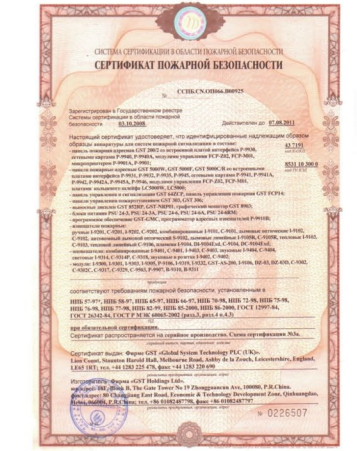
GST has strong production capacity and excellent manufacture process. With more than 20 advanced production lines and sound quality control system, GST became one of the biggest and most advanced production bases for electronic products in buildings. GST has obtained various national and international certificates, including CCCF, LPCB, UL, CE, PSB, SAI and HKFSD, etc.

GST has built up a strong R&D team engaged in product development and innovation in Beijing and a Post-Doctoral Research Center in QHD.

In domestic market, GST has set up more than 140 branch offices all over China to provide in-time supports. In the meanwhile, GST expands its territory to the Asia, Europe, Africa, South & North America, Oceania and Middle East, serves a variety of customer segments from government institutions, infrastructure, banks, hotels, commercial and residential buildings, schools, and industrial parks.

Since joined the family of UTC in the August of 2009, GST is keen on providing the most efficient one-stop solution of fire and security system, to both domestic and international customers, to improve life quality and facilitate community development of the region.

Certification and Approval



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UL Listed Fire Alarm System



GST-M200



Intelligent Fire Alarm Control Panel

- Single loop fire alarm control panel listed by UL
- Optional 2 loops with additional loop card
- Loop capacity: 230 intelligent devices for 1st loop, 242 devices for 2nd loop
- 2 Style Y Notification Appliance Circuits (NAC)
- 3 fixed relay outputs for fire/fault/supervisory
- Optional GMC connection
- Optional Network with GST UL listed panels
- Optional USB printer interface
- Walk Test function
- Positive Alarm Sequence (PAS) per point
- Programmable from panel keypad and pc software
- Advanced user friendly programming software including 'Fuzzy Logic'

Technical Specification

- 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

Graphic Monitor Center

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



GSTGMC-M2.2



I-9102(UL)



Intelligent Photoelectric 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 Specification

- 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



I-9103(UL)



Intelligent Rate of Rise and Fixed Temperature 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 Specification

- 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



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 Specification

- 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 58.5mm



C-9503



Loop 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 Specification

- 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



DZ-03(UL)



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



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 Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Loop
 - Standby Current 2mA
 - Action Current 3mA
 - 24VDC
 - Standby Current <10mA
 - Action Current <60mA
- Operating Environment:
 - Temperature: 0 ~ +49°C
 - Relative Humidity: 93%
- Dimension: 120mm x 80mm x 43mm

Addressable Single 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



I-M9301



Technical Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Loop
 - Standby Current 2mA
 - Action Current 3mA
 - Power
 - 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 Photoelectric Smoke Detector

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

Technical Specification

- 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 Rate of Rise and Fixed Temperature 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 Specification

- 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

Innovation 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
- Protection Rating: IP43

Technical Specification

- 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 58.5mm



Digital Intelligent Devices



DI-9102E



Digital Optical 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
- LED for 360° vision
- Built in remote indicator output
- Unique low profile design
- Magnetic Test
- LPCB Approved

Technical Specification

- Standard: EN54-part7
- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.8mA
 - Alarm Current: 3.8mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Programmable Sensitivity: 0.102dB/m~0.316dB/m - 3 levels
- Dimensions: Diameter 100mm, Height 54.5mm



DI-9103E



Digital Dual Heat Detector

- Advanced digital communication
- Built in 8 bit microprocessor
- 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
- Magnetic Test
- LPCB Approved

Technical Specification

- Standard: EN54-part5
- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.6mA
 - Alarm Current: 3.5mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Detector Class: A1R, A2S
- Dimensions: Diameter 100mm, Height 51.3mm



DI-9101E



Digital Multi Sensor

- Combined multiple detection of optical smoke and dual heat alarm
- Identifiable Smoke alarm and Heat alarm
- Advanced digital communication
- Electronic addressing
- Sensing chamber for exceptional dust proof ability
- LED for 360° vision
- Ideal alternative to Ionization detector
- Low profile design
- Magnetic Test
- LPCB Approved

Technical Specification

- Standard: EN54-part 5 / 7
- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.8mA
 - Alarm Current: 3.8mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Programmable Sensitivity:
 - Smoke Sensitivity: 0.102dB/m~0.316dB/m - 3 levels
 - Heat Class: A1R, A2S
- Dimensions: Diameter 100mm, Height 54.5mm



DB-01

Standard Base

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



DI-9204E



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 Specification

- Protection Rating: IP43
- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.6mA
 - Alarm Current: 1.8mA
- Operating Environment:
 - Temperature: -10 ~ +55°C
 - Relative Humidity: 95%
- Application: Indoor use
- Dimensions: 87.1 x 87.1 x 58 mm, Surface Mount
87.1 x 87.1 x 23 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-9204E and DC-9204E



D-92FC



D-92WPB

Water Proof Box

- IP66 protective enclosure for manual call points
- Large internal space enough for most types of MCP
- Dimensions: 110mm x 119mm x 44.5mm



DI-9406



Addressable Flashing Beacon Base

- Loop powered no additional cabling required
- 16 programmable tones
- Early notification setting for sleeping areas
- Sandwich design, Easy plus installation
- Electronically addressed
- Suitable for D series intelligent detectors
- LPCB Approved

Technical Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 1mA
 - Action Current: 6mA
- Sound Output (SPL): 92dB @1 Meter (Tone #14)
- Operating Environment:
 - Temperature -10 ~ +50°C
 - Relative Humidity 95%
- Dimension: Diameter 152.4mm, Height 43mm



DI-9405



Addressable Sounder Base

- Feature of DI-9406 without beacon flashing
- LPCB Approved

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 instead 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-9503E
- LED status indicator
- LPCB Approved

Technical Specification

- Operating Voltage: 24VDC
- Active Current: 1A
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Application: Indoor use
- Visual Indicator: Yellow LED
- Dimensions: Diameter 100mm, Height 39mm (with cover)



DC-9504E



Intelligent Fire Alarm Devices



I-9102



I-9103



DZ-03

Intelligent Photoelectric 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
- Removable optical chamber for easy cleaning and maintenance
- LPCB Approval

Technical Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.8mA
 - Alarm Current: 5.0mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 56mm

Intelligent Rate of Rise and Fixed Temperature 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
- With Remote Indicator output
- Twin LED for 360° vision
- LPCB Approval

Technical Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.8mA
 - Alarm Current: 5.0mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Detector Class: A1R
- Dimensions: Diameter 100mm, Height 58mm

Standard Detector Base

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



I-9101



I-9104



DZ-03T

Intelligent Combination Heat/Photoelectric Smoke Detector

- 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
- LPCB Approved

Technical Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.8mA
 - Alarm Current: 5.0mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 56mm

Intelligent Ultraviolet Flame Detector

- 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 meters
- Effective range 12 meters

Technical Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 2mA
 - Alarm Current: 2.5mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Detection Angle: 80°
- Dimensions: Diameter 103mm, Height 53.5mm

Thick Base

- 15mm thick base for detector installation without back box
- Cable routing through surface conduit



I-9105R



C-9314P



Intelligent Reflective Beam Detector

- Range 8 -100 Meters
- 2 selectable levels of sensitivity adjustment
- Compatible with conventional Panel
- Ideal for Atriums, Warehouses, Shopping Centers, 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 Specification

- 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 meters, with 7 meters 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 × 94mm × 135mm

Remote Indicator

- Remote indicator for direct connection to detector via remote indicator terminals
- Compatible with Intelligent and Conventional series detectors

Technical Specification

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



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 Specification

- 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 Base Mount Sounder

- Loop Powered Sounder.
- Can be used as a common base of detector or stand alone with a cover.
- Two addresses for (one for Alert and one for Evacuate tones).
- Electronically addressed

Technical Specification

- Operating Voltage: 24VDC Loop
- Operating Current:
Standby Current 1mA
Alarm Current 7mA
- Alarm Volume (SPL): 89dB @1 Meter
- Operating Environment:
Temperature: -10 ~ +50°C
Relative Humidity: 95%
- Dimension: Diameter: 10cm Height: 3.5cm
(without cover), 4.5cm (with cover)



I-9402



I-9401

Addressable Sounder Strobe

- 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 Specification

- 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 Meter
- Operating Environment:
Temperature: -10 ~ +50°C
Relative Humidity: 95%
- Dimension: 144mm x 90mm x 57mm

Intelligent Sounder Strobe

- Two parts construction with base mounted termination allows easy installation
- 16 programmable alarm tones
- Optional Evacuate + Alert mode
- Strobe provided by high intensity LED cluster
- Switch off Light or Sound output for special applications
- Optional loop powered or external 24VDC powering
- Optional power saving mode or hi-consumption mode
- Electronically addressed
- LPCB Approved

Technical Specification

- Operation Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
Power saving mode / Loop powered
Loop: Standby Current 2mA, Alarm Current 9mA
Power saving mode / 24VDC powered
Loop: Standby Current 1mA, Alarm Current 2mA
Power Supply: Standby Current 1mA, Alarm Current 9mA
Hi-consumption mode / Loop powered
Loop: Standby Current 2mA, Alarm Current 35mA
Hi-consumption mode / 24VDC powered
Loop: Standby Current 1mA, Alarm Current 2mA
Power Supply: Standby Current 1mA, Alarm Current 35mA
- Sounder Output: 98dB @ 1 Meter (Tone #16, 24VDC, hi-consumption)
- Protection Rating: IP33
- 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 83mm (shallow base)



I-9403





I-9404



Addressable Sounder

- Two parts construction with base mounted termination allows easy installation
- 16 programmable alarm tones
- Optional Evacuate + Alert mode
- Optional loop powered or external 24VDC powering
- Optional power saving mode or hi-consumption mode
- Electronically addressed

Technical Specification

- Operation Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
 - Power saving mode / Loop powered
Loop: Standby Current 2mA, Alarm Current 7mA
 - Power saving mode / 24VDC powered
Loop: Standby Current 1mA, Alarm Current 2.5mA
 - Power Supply: Standby Current 1.5mA, Alarm Current 7mA
 - Hi-consumption mode / Loop powered
Loop: Standby Current 2mA, Alarm Current 25mA
 - Hi-consumption mode / 24VDC powered
Loop: Standby Current 1mA, Alarm Current 2mA
 - Power Supply: Standby Current 1mA, Alarm Current 25mA
- Sounder Output: 98dB @ 1 Meter (Tone #16, 24VDC, hi-consumption)
- Protection Rating: IP33
- 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 83mm (shallow base)



I-9406



Addressable Flashing Beacon Base

- Loop powered no additional cabling required
- 16 programmable tones
- Early notification setting for sleeping areas
- Sandwich design, Easy plus installation
- Electronically addressed
- Suitable for I series intelligent detectors
- LPCB approved

Technical Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 1mA
 - Action Current: 6mA
- Sound Output (SPL): 92dB @1 Meter
- Operating Environment:
 - Temperature -10 ~ +50°C
 - Relative Humidity 95%
- Dimension: Diameter 152.4mm, Height 41.3mm



I-9300



Addressable Input Module

- Monitor switch contacts of remote equipment
- Loop powered
- Input programmable for NO or NC contacts
- Two part plug-in construction with base mounted termination allows easy installation and connection
- Electronically addressed
- LPCB Approved

Technical Specification

- 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 43mm



I-9300s

Addressable Input Interface

- Input interface for connecting non-addressable initialization device into GST intelligent system.
- Small in size suitable to be inserted into back box.
- Electronically addressed
- EOLR is used for cable monitoring of SC and OC
- Possible monitoring NO or NC dry contact input.

Technical Specification

- Operation Voltage: 24VDC
- Operating Current: 1.5mA
- EOLR: 4k7 OHM
- Wiring: Non-polarized 2-core for loop
Non-polarized 2-core for contact input
- Operating Environment:
 - Temperature: -20 ~ +55°C
 - Relative Humidity: 95%
- Dimension: 50mm×44mm×17mm



I-9301



Addressable Single I/O Module

- Addressable output module
- Optional dry contact output or active 24VDC output
- Loop powered for relay application
- Cable monitored active output suitable for connecting conventional sounders
- Two part plug-in construction with base mounted termination allows easy installation and connection
- Electronically addressed
- LPCB Approved

Technical Specification

- Operating Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
 - Relay mode
 - Loop: Standby Current 1mA, Active Current 3mA
 - Relay mode
 - Loop: Standby Current 1mA, Active Current 3mA
 - Power Supply: Standby Current 5mA, Alarm Current 20mA
- Wiring: Non-polarized two-core for loop
Non-polarized two-core for 24VDC power supply
- Operating Environment:
 - Temperature: -10 ~ +55°C
 - Relative Humidity: 93%
- Dimension: 120 mm x 80mm x 43mm

Addressable Output Interface

- Output interface for connecting non-addressable output device into GST intelligent system
- Small in size suitable to be inserted into back box
- Electronically addressed
- EOLR is used for cable monitoring of SC and OC

Technical Specification

- Operation Voltage: 24VDC Loop, 24VDC power supply
- Operating Current:
 - Standby Current: Loop 1mA, Power 1.5mA
 - Action Current: Loop 4mA, Power as per output current
- EOLR: 4k7 OHM
- Wiring: Polarized 2-core for loop
Polarized 2-core for power supply
Polarized 2-core for output
- Operating Environment:
 - Temperature: -20 ~ +55°C
 - Relative Humidity: 95%
- Dimension: 50mm x 44mm x 17mm



I-9301S



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
- 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 Specification

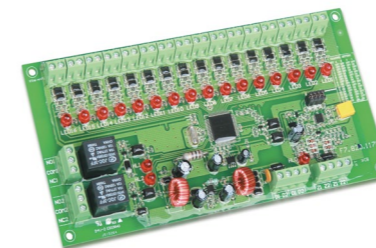
- Operating Voltage: 24VDC Loop, 24VDC Power Supply
- Operating Current:
 - Loop: Standby Current 1mA, Alarm Current 4mA
 - Power Supply: Standby Current 6mA, Alarm Current 45mA
- Wiring: Non-polarized two-core for loop
Non-polarized two-core for 24VDC power supply
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimension: 120 mm x 80mm x 43mm

Addressable Multi-channel Interface

- Cable monitoring for fault of short circuit and open circuit
- 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 Specification

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



DI-9309





I-9319



C-9503



C-9504E



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
- LPCB Approved

Technical Specification

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

Loop 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 Specification

- 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 43mm

Base Mount Short Circuit Isolator

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



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 Specification

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



GST-IFP8



Intelligent Fire Alarm Control Panel

- 8 x Loops (242) capacity (1936) addressable points
- Maximum 10 Loops Standalone
- Modular constructed for future expansion
- 40 x15 lines LCD Display.
- Up to 999 programmable zones and 140 zones' indication
- Day and Night Mode
- Enable and Disable function
- PAS and Acknowledge Function
- Dirty Detector Reporting
- Duplicate Address Checking
- Device Mismatch Checking
- Walk Test Function with optional silent mode
- Programmable from PC or Panel
- History record - 999 fire incident and 999 general events capacity in non-volatile memory
- Advanced user friendly programming software including 'Fuzzy Logic'.
- Networkable with GST Intelligent Fire panels up to 64 nodes
- Optional GST-GMC graphic station
- Optional RS 485 mimic and repeater up to 64
- Built in Fire Alarm, FPE, Fault and Alarm Router output
- Panel Printer included
- Built in Battery Charger
- Optional protection of re-programming
- Approved by LPCB

Technical Specification

- Standard: EN54 Part 2/4
- Approvals: LPCB, CE
- Main Input Voltage: 220/230VAC (± 10%) 50/60 Hz
- Input Current Rating: 1.0A
- System Operating Voltage: 24 VDC Nominal
- Loop Capacity: Loop 1-10: 242- Address per loop
- Zone Capacity: 999 Zones programmable
- Outputs (3):
 - Fire Routing: 200mA /24Vdc/4.7KΩ EOLR
 - F.P.E. Output: 500mA /24Vdc/4.7KΩ EOLR
 - Sounder Circuit Output: 1A /24Vdc/4.7KΩ EOLR
- Dimension: (HWD) 850 x 484 x 191 mm



GST200-2

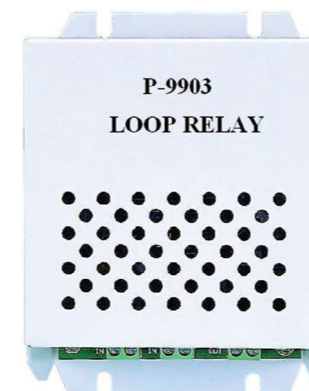


Intelligent Fire Alarm Control Panel

- 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
- Duplicate address report
- Mismatch device type report
- 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 graphic station
- Optional Panel Printer
- Advanced user friendly programming software including 'Fuzzy Logic'
- Optional protection of re-programming
- Approved by LPCB

Technical Specification

- Standard: EN54 Part 2/4
- Approvals: LPCB, CE
- Main Input Voltage: 220/230 VAC (+10/-15%) 50/60 Hz
- Input Current Rating: 0.5A
- System Operating Voltage: 24 VDC Nominal
- Loop Capacity: Loop 1: 235; Loop 2: 242
- 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) 580 x 420 x 202 mm



P-9903

Loop Relay Module

- Enhance loop appearance of distance and reliability
- Increase 1000 meters of loop distance. Maximum 2 pieces of relays can be connected in serial.
- Optoisolated output signal, resistant to industrial interference.
- 200mA/24VDC power supply required.
- Output supports Class B loop connection only.

Accessories of GST Intelligent Panels

	Type Code	Product	Function & Parameter	Compatible
	P-9901A	Panel Printer	Thermo printer. Paper size: 56mm	GST200-2
	LC200	Single Loop Card	Class A 242 devices capacity	GST200-2
	LCIFP8	Double Loop Card	Class A 484 devices capacity	GST-IFP8
	P-9930	RS232 Communication Card	Panel Defining GSTGMC communication	GST-M200 GST200-2
	P-9935	RS232 Communication Card	Panel Defining GSTGMC communication	GST-IFP8
	P-9930Modbus	RS232 Modbus Interface	Interface with BMS ver Modbus Protocol	GST-M200 GST200-2
	P-9935Modbus	RS232 Modbus Interface	Interface with BMS ver Modbus Protocol	GST-IFP8
	P-9943	RS485 Network Card	Class B	GST100
	P-9940A	RS485 Network Card	Class A	GST-M200 GST200-2
	P-9945A	RS485 Network Card	Class A	GST-IFP8
	P-9945RP	RS485 Repeater Card	Class B, for connecting passive repeater GST852RP & GST8903	GST-IFP8
	P-9960	CAN Network Card	Class B	GST-M200 GST200-2
	P-9960A	CAN Network Card	Class A	GST-M200 GST200-2
	P-9965	CAN Network Card	Class B	GST-IFP8
	P-9965A	CAN Network Card	Class A	GST-IFP8
	P-9904	USB Printer Interface	Connecting USB printer (EPSON LQ-300+II, LQ-590K)	GST-IFP8
	P-9905	USB Printer Interface	Connecting USB printer (EPSON LQ-300+II, LQ-590K)	GST-M200 GST200-2



P-9910B



GST852RP



GST-NRP01



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
- Adjusts input modules to accept N/C or N/O contacts
- Dimensions: 164mm x 64mm x 24mm

LCD 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 Specification

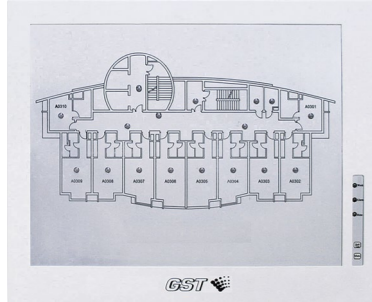
- Operation Voltage: 24VDC
- Standby Power: 2W
- Maximum Power: 5W
- Operation Environment:
 - Temperature: 0 ~ +40°C
 - Relative Humidity: 95%
- Dimension: 234mm x 104mm x 35mm

Network Repeater Panel

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

Technical Specification

- Operation Voltage: 24VDC
- Standby Power: 9W
- Maximum Power: 13W
- Operation Environment:
 - Temperature 0 ~ +40°C
 - Relative Humidity 95%
- Dimension: 390mm x 270mm x 100mm



GST8903



GSTGMC



GST-DEF-Key

Intelligent Graphic Repeater 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, Action and Fault conditions
- A3, A2 and A1 sizes

Technical Specification

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

Graphic Monitor Center

- Color 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

Dongle key

- Access control of GST Definition software Ver3.0
- Possible protect panels from non-authorized commissioning and re-definition



Power Supply Units



PSU24-5
PSU24-5A

Power Supply Unit

- 24 volt DC intelligent PSU, 5 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)
- Mains supply 230VAC (+10/-15%), 50Hz
- Max. Battery Size: 24VDC /12AH sealed lead battery
- Dimension: 400mm x 318mm x 128mm



PSU24-10
PSU24-10A

Power Supply Unit

- 24 volt DC intelligent PSU, 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 (PSU24-10A)
- Mains supply 110 ~ 230VAC, 50/60Hz
- Max. Battery Size: 24VDC /24AH sealed lead battery
- Dimension: 520mm x 350mm x 156mm



Innovation Conventional Devices



DC-9102E



Innovation Optical 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
- Magnetic Test
- LPCB Approved

Technical Specification

- Standard: EN54-part7
- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.06mA
 - Alarm Current: 10 ~ 30mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Programmable Sensitivity: 0.102dB/m~0.316dB/m - 3 levels
- Dimensions: Diameter 100mm; Height 54.5mm

Innovation 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
- Magnetic Test
- LPCB Approved

Technical Specification

- Standard: EN54-part5
- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.06mA
 - Alarm Current: 10 ~ 30mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Detector Class: A1R, A2S
- Dimensions: Diameter 100mm, Height 51.3mm



DC-9103E



DC-9101E



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
- LPCB Approved

Technical Specification

- Standard: EN54-part 5 and part 7
- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.06mA
 - Alarm Current: 55mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Programmable Sensitivity:
 - Smoke Sensitivity: 0.102dB/m~0.316dB/m - 3 levels
 - Heat Class: A1R, A2S
- Dimensions: Diameter 100mm, Height 54.5mm



DB-01

Standard Base

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



DB-01D

Diode Base

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



DC-9204E



D-92FC



D-92WPB

Innovation Manual Call Point

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

Technical Specification

- Protection Rating: IP43
- 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: 87.1 x 87.1 x 58mm, Surface Mount
87.1 x 87.1 x 23mm, 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-9204E and DC-9204E

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



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 Specification

- 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 56mm



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 Specification

- 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 58mm

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-03



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
- LPCB Approved

Technical Specification

- Standard: EN54-part 5 and part 7
- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 0.1mA
 - Alarm Current: 30mA
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimensions: Diameter 100mm, Height 56mm



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 meters
- Effective range 12 meters

Technical Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: 1.6mA
 - Alarm Current: 38mA
- Operating Environment:
 - Temperature: -20 ~ +50°C
 - Relative Humidity: 95%
- Detection Angle: 80°
- Dimensions: Diameter 103mm, Height 53.5mm



DZ-03D

Diode Base

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



R6601

4-wire Conventional Smoke Detector

- N/O contact output, contacts closed and self-lock when alarming
- New scattering technology
- Unique labyrinth design protect against insect, dust, light infiltration

Technical Specification

- 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



R6602

4-wire Conventional Heat Detector

- N/O contact output, contacts closed and self-lock when alarming
- Built-in single chip microcomputer for real time data sampling and processing
- Fixed temperature alarm

Technical Specification

- 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-9102R
S-9102N

Smoke Alarm (Battery Optical Smoke Detector)

- Self contained optical smoke detector and alarm buzzer
- Easy installation
- Test/Reset Button
- Low battery indication
- Battery removal will inhibit cover from closing (as per UL standards)
- Connection port to link up to 30 detectors in a single system (S-9102N)
- Output to interface with other security equipment (S-9102R)

Technical Specification

- Power Supply: 3VDC (2 AA LR6 Alkaline batteries, lasting 3 years)
- Sounder Output: 80dB @ 3 Meter
- Detection Area: 60m² ~100m²
- Output: 60mA/30VDC (S-9102R)
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimension: Diameter 120mm, Height 58mm (with base)



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 Specification

- 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-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 Specification

- Operating Voltage: 24VDC
- Operating Current:
 - Standby Current: <10mA
 - Alarm Current: 160mA
- Alarm Volume (SPL): >85dB @1 Meterr
- Wiring: 2-core polarized
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimension: 144mm x 90mm x 57mm



C-9404



Conventional Sounder

- Conventional electronic sounder
- 2 selectable tones
- Two parts construction with base mounted termination allows easy installation
- LPCB Approved

Technical Specification

- Operation Voltage: 24VDC
- Operating Current:
 - Standby Current: 0mA
 - Alarm Current: 35mA
- Sounder Output: 95dB @ 1 Meter
- Wiring: 2-core polarized
- Protection Rating: IP33
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimension: Diameter 110mm, Height 97.5mm



C-9403



Conventional Sounder and Strobe

- Two parts construction with base mounted termination allows easy installation
- 2-selectable tones
- Strobe provided by high intensity LED cluster
- LPCB Approved

Technical Specification

- Operation Voltage: 24VDC
- Operating Current:
 - Standby Current: 0mA
 - Alarm Current: 35mA
- Sounder Output: 95dB @ 1 Meter
- Protection Rating: IP33C
- Wiring: 2-core polarized
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimension: Diameter 110mm, Height 97.5mm



C-94DB

Deep Base

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



Conventional Fire Alarm Panels



GST102A
GST104A
GST108A
GST116A



GST101

Conventional Fire Alarm Panels

- 2/4/8/16 zone conventional fire alarm panels
- Pleasing color and fascia design
- Simplified user operation
- Both End of Line Resistor and Active End of Line can be used
- Day/night mode selected
- Zone isolate control
- Key-control evacuation over-ride
- Repeater output available
- Fire alarm output for remote alarm
- Class change terminal for remote control
- AEOL keeps cable continuity even detector removed
- AEOL max 15 fire detectors and infinite manual buttons each zone
- EOLR up to 25 detectors and infinite manual buttons each zone
- Optional relay output board
- LPCB Approved

Technical Specification

- Standard: EN54 Part 2 / 4
- Approvals: LPCB, CE
- Power Supply: 220/230VAC 50/60Hz
- Operating Environment:
 - Temperature: 0 ~ +40°C
 - Relative Humidity: 95%
- Dimension: 380mm x 320mm x 102.7mm

Conventional Fire Alarm Panel

- Single zone conventional fire panel
- Compact design
- Suitable for both Active and resistor end of line monitoring.

Technical Specification

- Standard: EN54 Part 2 / 4
- Power Supply: 220-230VAC 50/60Hz
- Operating Environment:
 - Temperature: 0 ~ +40°C
 - Relative Humidity: 95%
- Dimension: 210mm x 297mm x 90mm



GST-RP16

Conventional Repeater Panel

- Compatible with GST102A/4A/8A/16A
- Powered from FACP directly
- Zonal Fire and general Fault indication
- Max. 16 zones
- Dimension: 280mm x 110mm x 46mm



P-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 C conventional detectors
- Compatible with addressable zone interface I-9319



DP-9907

Active End of Line

- Active End of Line functioning as P-9907
- Compatible with DC conventional detectors



Gas Extinguishing System

	Type Code	Product	Function & Parameter	Compatible
	RB102A	Output Relay Board	2- Fire N/O Relay outputs 2- Fault N/O Relay Outputs	GST102A
	RB104A	Output Relay Board	4- Fire N/O Relay outputs 4- Fault N/O Relay Outputs	GST104A
	RB108A	Output Relay Board	8- Fire N/O Relay outputs 8- Fault N/O Relay Outputs	GST108A
	RB116A	Output Relay Board	16- Fire N/O Relay outputs 16- Fault N/O Relay Outputs	GST116A



GST301

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
- Built-in PSU and Charger

Technical Specification

- Operating Voltage: 220/230VAC, 50/60Hz
- Operating Current: 0.1A
- Backup Battery: 7AH/24VDC
- Sounder Output: 0.5A/24VDC
- Release Output: 2A/24VDC, Pulse
- Operating Environment:
 - Temperature: -10 ~ +50°C
 - Relative Humidity: 95%
- Dimension: 300mm x 350mm x 110mm

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 3/6 zones of extinguishing
- Auto and manual control facilities
- Utilizes GST intelligent detectors and programming (inc Fuzzy Logic) for control
- Fully monitored status control
- Requires 24VDC Power supply



GST303
GST306



C-9317

Emergency Start/Abort Switch

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



C-9318

Gas Extinguishing Warning Indicator

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



C-9329

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



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 network panels
- 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 Specification

- Operating Voltage: 24VDC
- Standby Current: 150mA
- Maximum Alarm Current: 750mA
- Operating Environment:
 - Temperature -5 ~ +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 network panels
- 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 Specification

- Operating Voltage: 24VDC
- Standby Current: 200mA
- Maximum Alarm Current: 1 Ampere
- Operating Environment:
 - Temperature -5 ~ +40°C
 - Relative Humidity 95%
- Dimension: 482.5mm x 132.5mm x 225mm



P-9911(S)

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



P-9911(F)

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



P-9911(J)

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



P-9911(M)

Fire Telephone Mobile Handset

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



Explosion Proof Products



DC-9101(IS)

Intrinsically Safe Combination Heat Photoelectric Smoke Detector

- Drift compensation suits environment changing extensively
- Sensitivities programmable, 3-level sensitivities and fixed temperature or rate of rise programmable
- Integrated algorithm for analyzing fire, improving the sensitivity
- Reed switch testing.
- Self-diagnostic
- Removable innovative sensing chamber, easy for maintenance
- LED allows 360° viewing

Technical Specification

- Operating Voltage: 24VDC (16VDC~28VDC)
- Standby Current: 60µA
- Alarm Current: 10mA ~ 30mA
- Action Temperature: 58°C
- Wiring: Polarized two-wire for power
- Ingress Protection Rating: IP23
- Environment Temperature: -10 ~ +50°C
- Relative Humidity: 95%, non condensing
- Dimensions: Diameter 100mm; Height 54.5mm (with base)
- Explosion-proof Mark: ExibIICT6 Gb



DC-9102(IS)

Intrinsically Safe Photoelectric Smoke Detector

- Drift compensation suits environment changing extensively
- Integrated algorithm for analyzing fire, improving the sensitivity
- Self-diagnostic
- Removable innovative sensing chamber, easy for maintenance
- LED allows 360° viewing

Technical Specification

- Operating Voltage: 24VDC (16VDC~28VDC)
- Standby Current: 60µA
- Alarm Current: <30mA
- Wiring: Polarized two-wire for power
- Ingress Protection Rating: IP23
- Environment Temperature: -10 ~ +55°C
- Relative Humidity: 95%, non condensing
- Dimensions: Diameter 100mm; Height 54.5mm (with base)
- Explosion-proof Mark: ExibIICT6 Gb



DC-9103(IS)

Intrinsically Safe 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 Specification

- Operating Voltage: 24VDC (12VDC~28VDC)
- Standby Current: 60µA
- Alarm Current: 10mA~30mA
- Detection Class: A1R (default) & BS
- 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 53.3mm (with base)
- Explosion-proof Mark: ExibIICT6 Gb



DC-9403(IS)

Intrinsically Safe Conventional Sounder Beacon

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

Technical Specification

- 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



DC-9404(IS)

Intrinsically Safe Conventional Sounder

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

Technical Specification

- 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



DC-9202(IS)

Intrinsically Safe Manual Call Point

- Re settable non-breaking glass

Technical Specification

- Operating Voltage: 24VDC (12VDC ~ 28VDC)
- Standby Current: 0mA
- Alarm Current: 10-30mA
- Wiring: Two wire
- Ingress Protection Rating: IP43
- Environment Temperature: -10 ~ +55°C
- Relative Humidity: 95%, non condensing
- Dimensions: 95.4mm × 98.4mm × 45.5mm
- Explosion-proof Mark: Exib II CT6 Gb



DI-9204Exd

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 Specification

- Operating Voltage: Loop 24V
- Operating Current:
 - Standby Current: 0.8mA
 - Alarm Current: 2.5mA
- Operating Environment:
 - Temperature: -40 ~ +70°C
 - Relative Humidity: 95%
- Dimension: 219mm x 129mm x 95mm
- Ex Mark: ExdIIBT6 Gb/DIP A20 TA, T6
- Ex Certificate No.: CE12.1341

Digital Flame Proof UV Flame Detector

- Built-in single chip microcomputer for signal processing and intelligent communication control
- Connect directly to GST addressable loop, compatible with all GST intelligent panels
- Possible works in conventional mode, provides N/O contact output for easy interfacing
- Intelligent algorithm for fast alarm, response and superior false alarm rejection
- High sensitivity and reliable performance, dust/corrosion/humidity resistant
- Stylish pleasing design with aluminum alloy shell, small volume and light weight for better mechanical strength
- Adapted to explosive area 1 & 2

Technical Specification

- Operating Voltage: 24V
- Operating Current:
 - Standby Current: 2mA
 - Alarm Current: 3mA
- Operating Environment:
 - Temperature: -20 ~ +60°C
 - Relative Humidity: 95%
- Dimension: 147mm x 106mm x 92mm
- Ex Mark: ExdIICT6 Gb
- Ex Certificate No.: CE12.1356x



DI-9104Exd



D-9105RExd

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 judgment 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 Specification

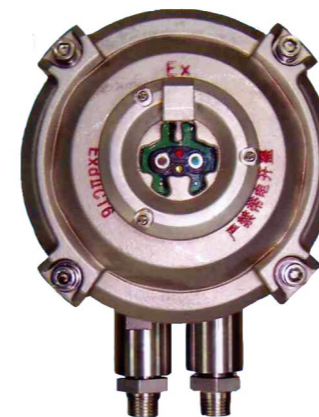
- Operating Voltage: 24V
- Operating Current:
 - Power: Commission Current 20mA
 - Standby Current 12mA
 - Alarm Current 22mA
 - Loop: 2mA
- Operating Environment:
 - Temperature: -20 ~ +55°C
 - Relative Humidity: 95%
- Dimension: 344mm x 240mm x 212mm
- Ex Mark: ExdIICT6 Gb/ DIP A21 TA, T6
- Ex Certificate No.: CE11.1246x

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 Specification

- Operating Voltage: 24V
- Operating Current:
 - Loop
 - Standby Current: 1mA
 - Alarm Current: 1mA
 - 24VDC
 - Standby Current: 20mA
 - Alarm Current: 30mA
- Operating Environment:
 - Temperature: -20 ~ +55°C
 - Relative Humidity: 95%
- Dimension: 166mm x 235mm x 199mm (with frame)
- Ex Mark: ExdIICT6 Gb/DIP A21 TA, T6
- Ex Certificate No.: CE11.1229



D-9107Exd



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 Specification

- 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

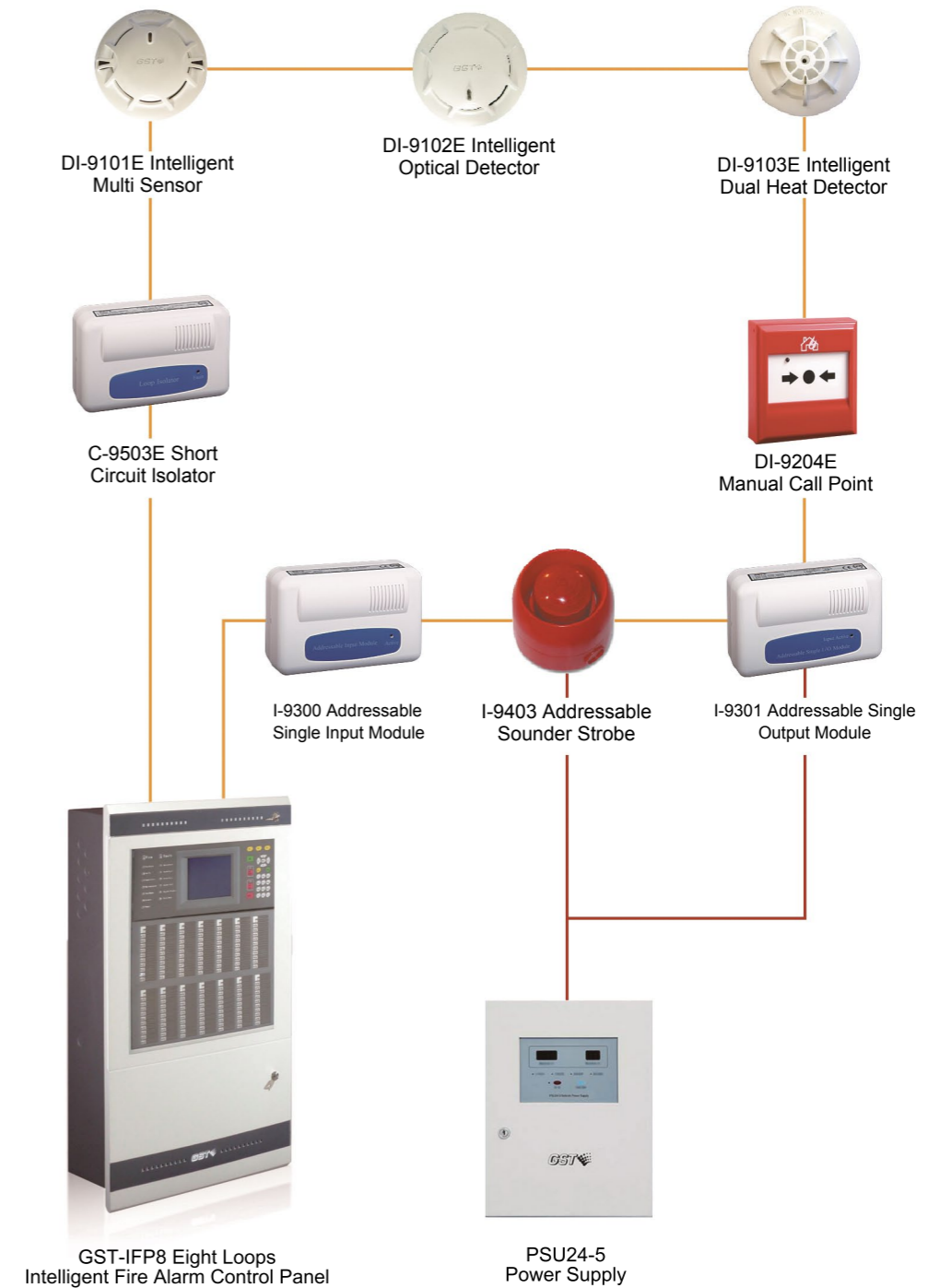
Flame Proof Sounder Control Interface

- 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

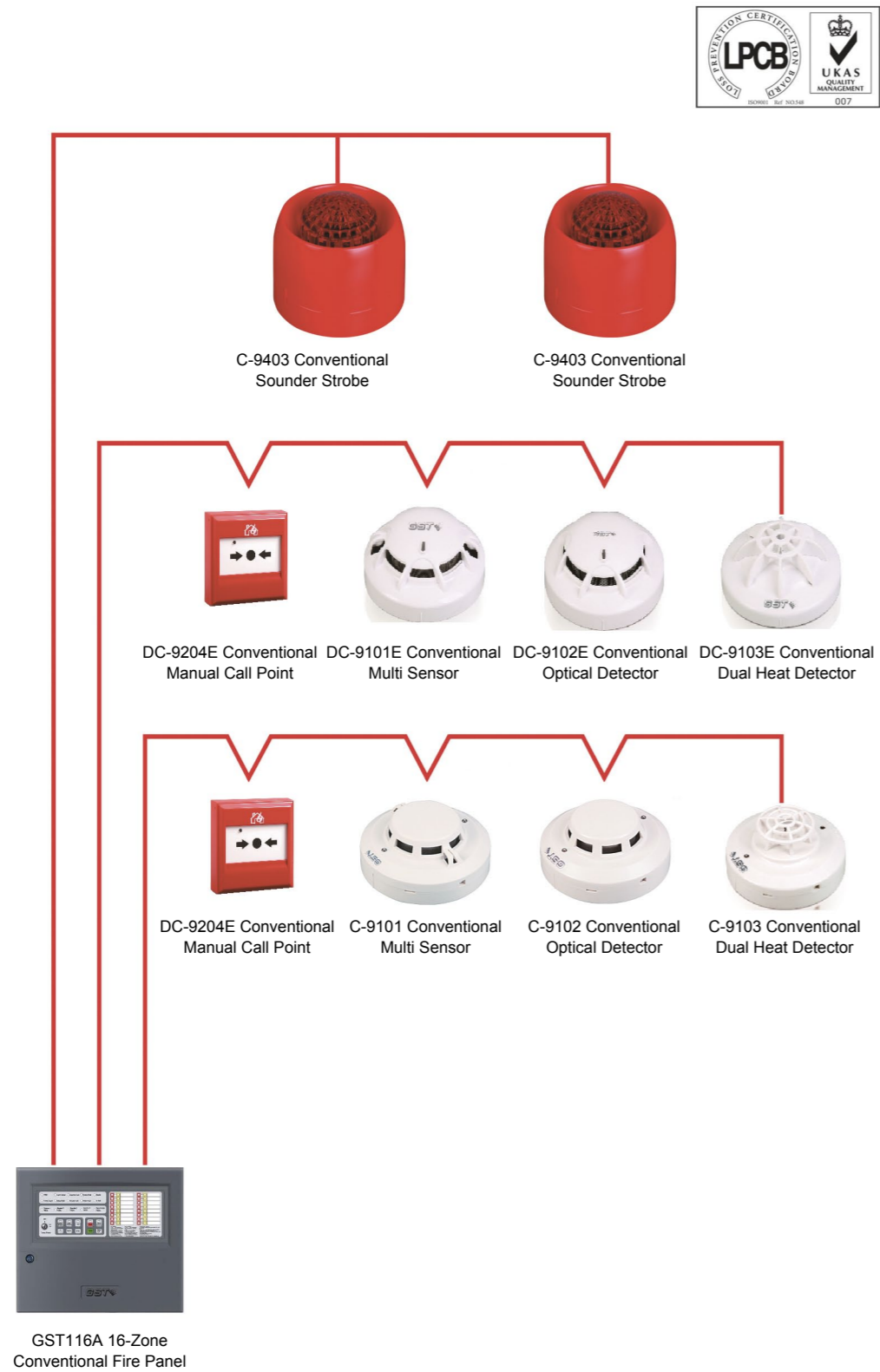
Technical Specification

- 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

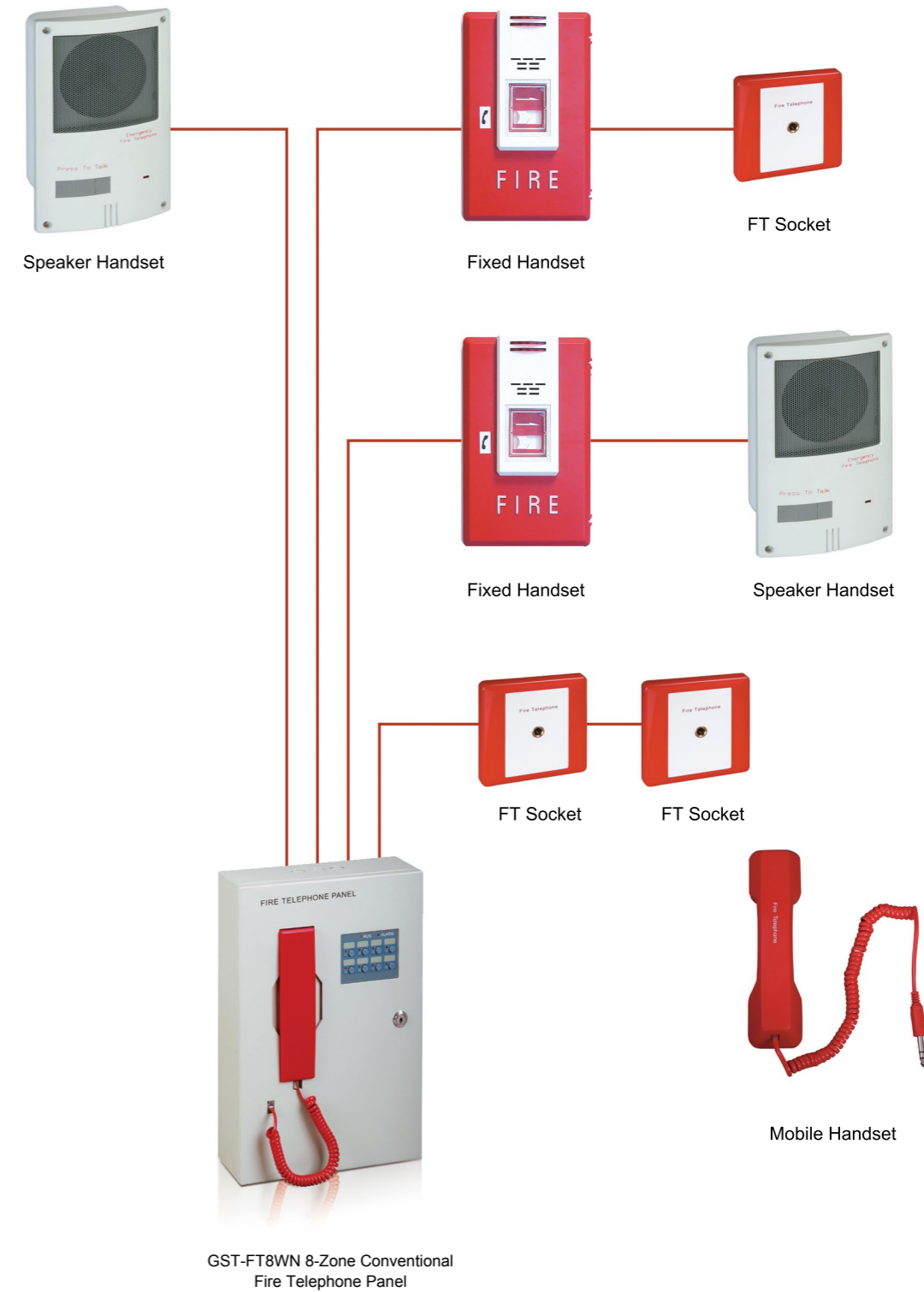
Intelligent Fire Alarm System



Conventional Fire Alarm System



Fire Telephone System





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