CHANNEL

GST

Conventional alarm systems
from Channel Safety Systems

GST

Conventional alarm systems

These fire detection control panels are packed with varied and effective features that are not usually associated with smaller systems.

Making use of advanced GST protocol, these systems are compatible with complete range of sounders, call points, GST intelligent detectors, interfaces including intrinsically safe and gaseous extinguishing control.

Owing to the attributes such as semi flush-mounted, flexible configuration unique design for modern technology and easy operation, these fire panels are widely appreciated in the market.

These fire panels find their applications in offices, restaurants, bars, shops, libraries, transformer substations and supermarkets.

Features

- 2 to 16 zones can be detected, compatible with conventional detectors. Each of the 16 detection zones can be individually configured as maximum 15 conventional detectors. The total number of detectors in a zone shall not exceed 32.

- 4 sounder outputs, 1 alarm output and 1 fault output

- Test and disable functions

- Day/night mode settable

- Programmable on manual call point connection, sound modes, sounder delay modes and output delay modes

Product Dimensions for 2, 4, 8 & 16 Zone Panels
Height 380mm
Width 320mm
Depth 95mm

- Able to report short circuit and open circuit of detection zones, sounder outputs and alarm output

- Three access levels settable via a key switch and an internal switch

- Reserved repeater panel interface for fire alarm indication of multiple zones

- Providing external ports includes RESET, SILENCE, EVAC and forced Night Mode

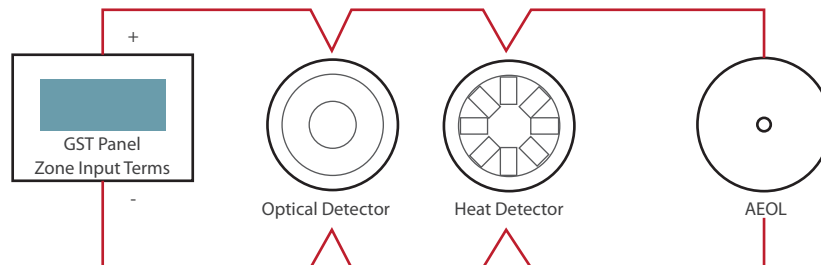- Designed with standby batteries and space provision for two sealed-acid batteries

Wiring Diagram

GST Panel Zone Input Terms   Optical Detector   Heat Detector   AEOL

SPECIFICATIONS	
Operating Voltage	220V/230VAC+10% -15%
Frequency	50/60Hz
Input Current	0.35 A
Fuse	2A delayed
Recommended Wiring	1.5mm2 or above shield cable, complying with local installation codes
Minimum Operating Voltage	21.5V
Maximum Charging Current	315mA
Maximum Charging Voltage	27.6V
Battery Type	Sealed lead-acid battery
Maximum Battery Charging Capacity	2 batteries, 7Ah/12V
Maximum internal resistance of the batteries	1Ω
Standby current of batteries when fully load	0.1A
Maximum operating current of the batteries	2.5A

PRODUCT CODE	DESCRIPTION
F/CH/GST102A	GST 2 zone control panel
F/CH/GST104A	GST 4 zone control panel
F/CH/GST108A	GST 8 zone control panel
F/CH/GST116A	GST 16 zone control panel
F/CH/GST/RB102A	Relay board for GST102A, for zonal fault and fire alarm signal output
F/CH/GST/RB104A	Relay board for GST104A, for zonal fault and fire alarm signal output
F/CH/GST/RB108A	Relay board for GST108A, for zonal fault and fire alarm signal output
F/CH/GST/RB116A	Relay board for GST116A, for zonal fault and fire alarm signal output

GET INTERACTIVE

Scan the code for more information on the GST Fire Alarm System

www.channelsafety.co.uk/gst/

Optical Detector

F/CH/GST/C-9012 Conventional Photoelectric Smoke Detector is non-addressable. Used together with end of line unit, it can connect with compatible control panels to process detection signals. It shows fire alarm by LED indicators and transmits the fire signal to the control panel. Using infrared scattering technology, the smoke density can be detected.

The detector receives very weak infrared light under normal smokeless condition. If smoke particles enter the chamber, the received light signal will increase by scattering. When smoke density reaches a pre-set level, the detector will alarm out. In order to reduce interference and power consumption, the emitting circuit works in pulse mode to prolong the life of IR LED.

SPECIFICATIONS	
Operating Voltage Range	24VDC(12VDC~28VDC)
Standby Current	≤60µ A
Alarm Current	10mA≤I≤30mA
Maximum Ripple Voltage	4V (peak-to- peak)
Alarm Clear	Instantaneous Power-off (5s Max., 2.5VDC Max.)
Power up Time	≤10s
Max. Wind Speed	7.6m/s (1500fpm)
Wiring	Polarized 2-core for detection zone cable. Polarized 2-core for remote indicator.
Ambient Temperature	-10ºC - +50ºC
Relative Humidity	≤95%, non condensing
IP Rating	IP23
Weight	120g

Product Dimensions
Diameter 100mm
Depth 58mm with base

PRODUCT CODE	DESCRIPTION
F/CH/GST/C-9012	Optical detector complete with remote indicator output without base

Heat Detector

F/CH/GST/C-9103 Conventional Rate of Rise and Fixed Temperature Heat Detector is non-addressable. With built-in microprocessor, it works stably with reliable fixed fire judging program. Used together with an active end of line unit (AEOL), it can connect with compatible control panels to process fire alarm signals.

It transmits fire signal to fire alarm control panel or interface module by changing its own current and shows the fire alarm by LED indicator until it's reset.

SPECIFICATIONS	
Operating Voltage Range	24VDC(12VDC~28VDC)
Standby Current	≤60µ A
Alarm Current	10mA≤I≤30mA
Maximum Ripple Voltage	4V (peak-to- peak value)
Alarm Clear	Instantaneous Power-off (5s Max., 2.5VDC Max.)
Power up Time	≤10s
Action Temperature	58ºC
Class	A1R
Wiring	Polarized 2-core for detection zone cable. Polarized 2-core for remote indicator.
Operating Temperature	-10ºC - +50ºC
Relative Humidity	≤95%, non condensing
IP Rating	IP33
Weight	120g

Product Dimensions
Diameter 100mm
Depth 58mm with base

PRODUCT CODE	DESCRIPTION
F/CH/GST/C-9103	Fixed & rate of rise heat detector complete with remote indicator output without base

Passive Remote Indicator

The F/CH/GST/C-9314P Remote Indicator is used to display an alarm from a detector. Suitable applications include when a detector is installed inside a room, false ceiling or an under floor cable space. When the detector issues an alarm, the LED on the lamp will light indicating where the detector was triggered.

Product Dimensions

- Height 650mm
- Width6.650mm
- Depth 31.4mm

SPECIFICATIONS	
Operating Voltage Range	2.5 - 3V DC
Operating Current	30mA
Operating temperature	-10°C to +50°C
Indicator	Red LED
Relative Humidity	≤95%
Weight	30g

PRODUCT CODE	DESCRIPTION
F/CH/GST/C-9314P	Passive remote indicator

Active End of Line Unit

Matching with conventional fire alarm control panel or addressable zone monitor unit, F/CH/GST/P-9907 Active End of Line Unit takes place of end-of-line resistor which is connected to the loop in traditional way. It resolves such problems as abnormal operation of the whole system and nuisance alarm because of inappropriate resistor.

Product Dimensions

- Diameter 103mm
- Depth 37.4mm

SPECIFICATIONS	
Operating Voltage	24V DC (15V DC~28V DC)
Operating Current	≤5mA
Equivalent Resistor	4.7kΩ
Wiring	Two-wire, polarized
Operating Temperature	-10°C - +50°C
Relative Humidity	≤95%, non condensing
IP Rating	IP33
Weight	88g

PRODUCT CODE	DESCRIPTION
F/CH/GST/P-9907	Active end of line unit for C series devices

Diode Base

F/CH/GST/DB-01D Base is used to mount digital and innovation conventional smoke, heat and combination detectors as their conductive base. It's made of flame-resistant plastic ABS. It features attractive appearance, novel structure and stable performance. Its flame class is V-0. During installation, you can easily fix the base before connecting cables, and then twist the detector onto the base.

Product Dimensions

- Diameter 100mm
- Depth 14mm

SPECIFICATIONS	
Flame Class	V-0
Wiring	Polarized two-wire with power cable
Operating Temperature	-10ºC - +50ºC
Relative Humidity	≤95%, non condensing
Weight	55g

PRODUCT CODE	DESCRIPTION
F/CH/GST/DB-01D	Innovation standard detector base complete with diode for innovation detector using P-9907

Detector Base

F/CH/GST/DZ-03D Base is used to mount conventional and intelligent smoke, heat and combination detectors as their conductive base. It's made of flame-resistant plastic ABS, which is a UL94 listed material. It features attractive appearance, novel structure and stable performance. Its flame class is V-0. During installation, you can easily fix the base before connecting
cables, and then twist the detector onto the base.

Product Dimensions

- Diameter 103mm
- Depth 14mm

SPECIFICATIONS	
Wiring	Polarized two-wire with power cable
Operating Temperature	-10ºC - +50ºC
Flame Class	V-0
Relative Humidity	≤95%, non condensing
IP Rating	IP33
Weight	45g

PRODUCT CODE	DESCRIPTION
F/CH/GST/DZ-03D	Detector base complete with diode when using P-9907

Reflective Beam Detector

F/CH/GST/I-9105R Conventional Reflective Beam Detector is an addressable reflective infrared beam smoke detector that can be directly connected to a fire alarm controller, by transmitting status information via bus between the detector and controller. The detector must be used together with a reflector.

The number of reflector(s) to be used (one or four) depends on the distance from the detector. With built-in intelligent microprocessor, the detector has strong ability of analysis and judgment. The detector is ideally suited to historical buildings, warehouses, large storages, shopping malls, leisure centers, exhibition halls, hotel lobbies, printing houses, clothing factories, museums and prisons, as well as places where slight smoke particles or corrosive gas exist.

Features

- Wide monitoring area, range 8-100 meters
- Combination of the emitting and receiving parts makes mounting easy and optical pathway accurate
- Simple and cost effective to install transmitter and reflective 'honey comb' mirror
- Quick and easy to set up visual strength indication
- Build-in microprocessor
- Self-diagnosis function can monitor the inner fault
- Automatic compensation for factors weakening received signals, such as dust contamination, positional excursion and ageing transmitter.
- SMT processing technology
- Attractive and decent appearance
- Infrared light beam smoke detector
- Reflective type
- Adjustable 3 sensitivity levels
- Protecting width 14m
- CE approval

The detector can be mounted in 2 ways: the installed onto standard two gang electrical box, or directly by drilling the holes and fixing with plugs.

Product Dimensions

- Height 206mm
- Width 95mm
- Depth 95mm

PRODUCT CODE	DESCRIPTION
F/CH/GST/I-9105R	Reflective beam detector complete with 4 reflectors, 8-100 meters 24V DC

SPECIFICATIONS	
Power Voltage	24V DC (±10%)
Loop Voltage	24V DC
Standby current	12mA
Alarm current	22mA
Length of Optical Pathway	8-100meter
Monitoring Area	1400m^2
Commissioning Tools	Magnet
Monitoring width	14m
Indication	Commission: Green LED and Yellow LED are lit or flash in a certain way Normal monitoring state: Red LED flashes periodically (with loop connected) Fire: Red LED constantly illuminates, and Yellow LED turns off. The fire signal has to be cleared by the controller Fault: Yellow LED constantly illuminates.
Operating Temperature	-10℃ to +50℃
Wiring	1 pair -24V DC, 1pair- loop
IP Rating	IP20
Relative Humidity	95%
Weight	30g

Did you know that Channel Technical Services offer a Free Design service?

Channel Technical Services; a division of Channel Safety Systems, offers a Design, Supply, Installation, Commissioning and Maintenance services for all Fire Alarm panels and devices.

For all requirements please contact Channel Technical Services team on 0845 884 7000