

- High integrity system
- Flammable, Oxygen or Toxic gases
- Wide range of enclosures, wall-panel mount, desktop or floor standing
- 3 adjustable alarm trip points
- 3 alarm relays per module
- Unlimited number of sensor points
- Standby battery charger module
- 4 - 20mA output per module



The GDS 2010 has been designed with features that will provide an effective response to the detection and control of gas hazards in a wide range of industrial environments from boiler plant rooms to offshore petrochemical installations.

The system is offered in a wide range of enclosures, from single module din rail mounting to multi-channel interconnected 19" rack based tower systems of unlimited size. Each alarm module operates independently having alarm status indicators, sounder and three alarm levels with individual relays for the control of remote safety systems. 4-20mA or 0-10V outputs are available for use in proportional control systems such as speed control of extractor fans.

Common alarm relays and indicators are available via an optional facilities module which can be plugged into any available module socket on the system. The facilities module can also be used remotely as a control and status indicator panel, having built-in sounder with sounder accept and alarm reset functions.

The advanced features designed into the GDS2010 system ensure ease of maintenance and provide the highest integrity rating, with the minimum loss of sensor cover should a fault condition occur.

### DETECTOR MODULE

1 to 14 per 19" tray

### Measuring Range

Combustible – % L.E.L

Toxic – ppm

Oxygen – % Vol

### Indicators

Digital Display

Power indicator – Green L.E.D

Alarm Relays Inhibit – Amber L.E.D

Alarms Lo-Hi-Red L.E.D (Alarms 1 & 2)

Ovrange-Red L.E.D (Alarm 3)

Fault – Amber L.E.D

### Relays

Alarms Lo, Hi SPCO N/D or N/E latched/unlatched

Fault SPCO N/D or N/E latched/unlatched

All relays rated 5A/230vAC

Alarm relays, inhibit switch

### Audible Alarm

Alarms 1,2,3, Fault

Disable option

### Analogue Output

4-20mA – 250  $\Omega$

0-10v – 1K  $\Omega$

### Sensor Inputs

4-20mA – 2/3 wire

Bridge type 3 wire-mv

## FACILITIES MODULE

1 per System

### Indicators

Power-Green LED  
Alarms Lo, Hi, Overrange-Red LED  
Fault-Amber LED

### Relays Common

Alarms Lo, Hi, Overrange, Fault, SPCO  
N/D or N/E latched/unlatched  
Mains fail N/E unlatched  
All relays rated 5A/230vAC

## STANDBY BATTERY MODULE

1 per System - 24vDC

### Indicators

Power-Green LED  
High Battery Volts - Red LED  
Low Battery Volts - Red LED  
Charge Fail - Amber LED

### Charging Method

Constant Voltage

### Load Capacity @24v

2A standard 7A option

## MISCELLANEOUS

### Sensor Cable

Screened 1.5mm<sup>2</sup>  
Bridge - 1km  
4-20mA - 2.5km

### Field Terminals

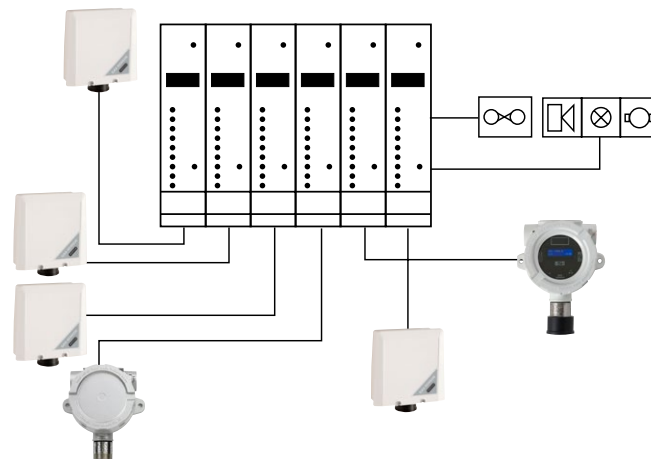
Screw type up to 2.5mm

### Module Dimensions

3U High (128mm)  
6E Wide (30mm) Depth (160mm)

### Environmental

Operating Temp -10 to 50°C  
Humidity 0 - 90 RH



## Alarm/facilities/stand-by battery charger - Field Terminals

Alarm Module		Facilities Module		Battery Stand-by Module	
V	Common Remote Acc/Reset	V	Common Acc/Reset	V	+ Battery
W		W		W	Low AC V in (22v)
X	Lamp Flash Sync-Further racks	X	Lamp Flash Sync	X	
1	N/O	1	N/O	1	
2	C Relay A2 (High)	2	C Relay A2 (High)	2	
3	N/C	3	N/C	3	
4	W	4	N/O	4	
5	Y Sensor	5	C Over Range Relay	5	
6	P	6	N/C	6	
7	N/O	7	N/O	7	
8	C Relay A1 (Low)	8	C Relay A1 (Low)	8	- Battery
9	N/C	9	N/C	9	
10	+ Anal.O/P 4-20mA/1-5V	10	N/C Power fail	10	
11	-	11		11	
12	N/O	12	N/O	12	
13	C Relay Fault	13	C Relay Fault	13	
14	N/C	14	N/C	14	
15	+ DC v In/Out	15	+ DC v In/Out	15	
16	-	16	-	16	
Y	Module Remove Loop	Y	Module Remove Alarm	Y	
Z		Z		Z	



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