

GDS 301

SINGLE LINE SAMPLE UNIT

- Continuous monitoring
- Flammable, oxygen or toxic gases
- Easily installed and maintained
- 2 alarm levels & relays
- 4~20mA analogue output
- Line blockage and pump fail monitor
- Delay to alarm option



The GDS 301 system is designed to monitor gas levels in situations where the positioning of conventional gas sensors may not be practical. This may be due to equipment security, cable routing, access for detector head installation/maintenance, harsh environment or a cost effective means of monitoring designated hazardous areas, typically - tunnels, marine applications, underground/high level voids, process control, brewing, horticulture, livestock husbandry.

Operation

A gas sample is continuously extracted via a fixed sample line from the target area. The central unit provides gas level readouts with two alarm trip points, providing a range of signal outputs for annunciator or control functions.

A wide range of sensor devices are available to suit customer requirements which include infra red, electrochemical, catalytic and other specialist sensors which offer a 4~20mA signal output.

Measurements

Combustible Gas L.E.L %Vol, ppm
Toxic Gas - ppm, %Vol
Oxygen % Vol

Power supply

230/115vAC or 24vDC \pm 15%
The two voltages may be used
simultaneously (standby batteries)

Frequency

50/60Hz

Consumption

10 watts

Alarm Settings

Digital setting (fully adjustable between zero and full scale)

Alarm delay

T1 - 10 seconds, T2 - 30 seconds,
T1 + T2 - 10 minutes

Indicators

Power - Green L.E.D.
Alarms - Low/High - Red L.E.D.
Flow fail - Amber L.E.D.
Fault - Amber L.E.D.
System test alarm L.E.D's flashing

Outputs

Low alarm relay - S.P.C.O
High alarm relay - S.P.C.O
Fault alarm relay - S.P.C.O
Flow fail - S.P.C.O
Relays rated 5A/230vAC
ND or NE pre set normally de energised
Analogue 4-20mA/1-5v
24vDC - 100mA max (Auxiliary equipment supply)

Audible Alarm

Low, High gas and Fault
Permanent mute option

Reset Switch

Auto or Manual - pre set manual

Test Switch

Used to check alarm indicators, sounder and relay action

Inhibit

Isolation of alarm relays during service

Protection

IP55

Environmental

Ambient temperature -5 to 45°C
Storage temperature -10 to 50°C
Humidity range 0 - 90 RH

Cable Entry

Rear, side, top, bottom

Sample Tube

6mm OD 4mm ID
Max. length 100m

Exhaust port

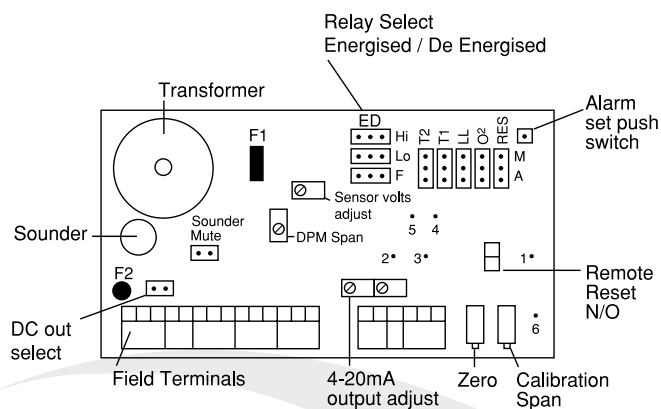
8mm OD

Miscellaneous

Dimensions 315mm W 265mm H 95mm D

Weight 3.8kg

Cable entry - bottom, sides, rear



T1 – Alarm delay - 10 secs
T2 – Alarm delay - 30 secs
T1 & T2 Alarm delay - 10 minutes
LL – Low/Low alarm
O2 – Oxygen sensor
RES – Manual/Auto Reset
TP1 – OV

TP2 + } 4~20mA output mV=mA
TP3 – }

TP4 + } DPM span 0.5v=F.S.D
TP5 – }

TP6 and TP1 sensor supply mV = mA

