GDS 305
SEQUENTIAL GAS SAMPLING SYSTEM 1-48 WAY

GDS TECHNOLOGIES

- 1-48 sample points
- Monitor up to 8 gas types
- No sample line purge delay
- Wide range of sensor types
- 4 line alpha/numeric display
- Selectable sample line sequence
- Display of each sample line location
- Easily installed and maintained
- Full indication of all operations
- Event logging / Modbus / RS232 / RS485
- Line blockage and pump fail monitoring
- Variable sample time for optimum cycle time
- High integrity, comprehensive self check fault monitoring
- Centralised one man calibration offers minimum running costs
- Split system operation – optional
- Line blockage, blow back – optional
- Hazardous area operation – optional
- Remote control panel – optional
- LED/text indicator panel – optional
- Auto flood cut off – optional
- Enclosure internal gas monitoring with automatic system shutdown – optional
- Sample line multiplier – optional

The GDS 305 system is designed to monitor gas levels from a number of sample-points, targeted at 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, landfill, multi storey car parks, brewing, horticulture, superstore multi refridgeration units, Bio-fuel storage compounds

Operation
Gas samples are sequentially extracted for a timed period by a central control unit via fixed sample lines. A high rate sample is taken by the main pump during which a reduced rate sample is passed across the sensor device. The central unit provides gas level readouts with two alarm trip points per line, providing a range of signal outputs for annunciator and control functions.

Sample points
1-48

Sensors
1-4 4~20mA input / 1-8 CANbus

Measurements
Combustible gas - LEL % vol
Toxic gas – ppm % vol
Oxygen – % vol
Depletion/enrichment
Refrigerant – ppm

Power Supply
230/115vAC 50/60Hz
300W max

LED Indicators
System healthy
Main power
Standby power
High gas alarm
Low gas alarm
System, flow, sensor fail
Comms fail
Skip/hold
Sampling

Display

- 4 line alpha/numeric indicates all functions and status in text. Sample line locations (user settable)

User interface

- 8 panel mounted push buttons – main panel and remote panel:- Reset, Scroll, Hold, Dim, Enter, Down, Up, Select
- PC – event log / data log, data to and from system controls

Relay Outputs

- Global Low S.P.C.O.
- Global High S.P.C.O.
- Global Fault S.P.C.O.
- Flow Fail S.P.C.O.
- Power Fail S.P.C.O.
- Cabinet Sensor S.P.C.O.
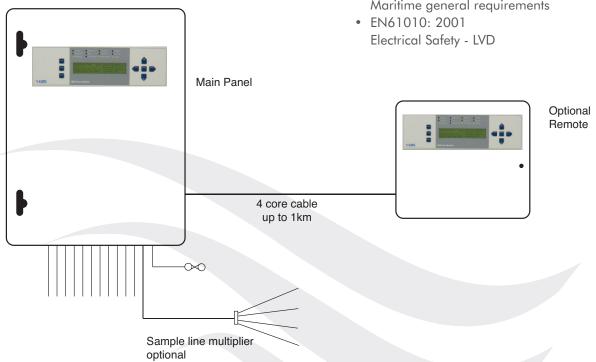- 32 programmable relays
- Additional 32 optional

Communication

- RS232– Data Stream
- Modbus 2 x RS485
- Can bus – internal

General

- Audible alarm all alarm conditions
- LED/display dimming
- User/Eng password
- LCD backlight
- Event logging
- Sample line size 8mm OD 6mmID
- Maximum length 300m
- Nylon, PTFE, Copper, Stainless Steel
- Sample vent x 2-10mm
- Tubing entry enclosure base, side option
- Response time 15 to 45 seconds
- Colour - powder coat ash grey BSA01
- Size 800mm H x 600mm W x 350mm D
- IP 63
- Wall mount
- Weight 65kg

Standards

- EN60945: 2002 Maritime general requirements
- EN61010: 2001 Electrical Safety - LVD

Main Panel

Optional Remote

4 core cable up to 1km

Sample line multiplier optional

C859

This document is not contractual and the equipment specification may be modified at any time without prior notice.