GAS LEAK DETECTION SYSTEMS

Detect the Leak Before There Is a Fire

Fixed field transmitters for LPG, combustible, toxic and oxygen monitoring — wired to a multi-zone control panel that sounds the alarm and closes the gas supply automatically.

WHY IT MATTERS

Alarm Well Below the Explosive Limit.

10%
Of the lower explosion limit — the level our transmitters alarm at, far below any explosive concentration

900
Square feet supervised by a single detector; spaced on 10 m centres in larger areas

85dB
Minimum annunciation on alarm, on a tone distinct from the building fire alarm

HOW IT WORKS

Sense. Alarm. Isolate. Alert.

1 **Sense**
Semiconductor sensor detects gas by natural diffusion and alarms above 10% LEL.

2 **Signal**
Relay contact signals the control panel; the affected zone is identified by LED.

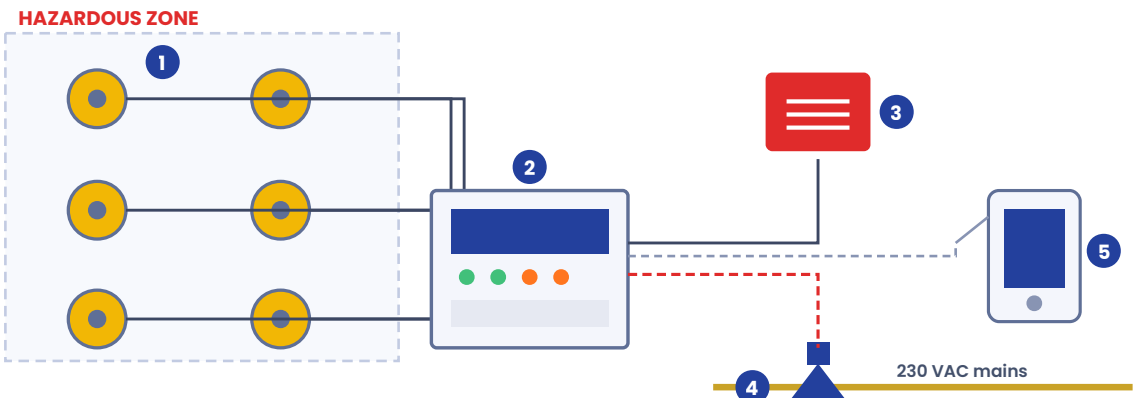
3 **Alarm**
Hooter-cum-flasher activates at 85 dB with a distinct visual warning.

4 **Isolate**
Panel relay drives the solenoid valve, closing the gas supply at source.

5 **Alert**
Optional GSM module sends SMS, email and voice calls to up to 15 numbers.

SYSTEM LAYOUT

Field Transmitters. One Panel. Automatic Shut-Off.



1 Field gas transmitters (CI-1100 / CI-2200) 2 Multi-zone control panel 3 Hooter-cum-flasher, 85 dB minimum
4 Solenoid shut-off valve on the gas line 5 Optional GSM module for SMS and voice alerts

WHERE IT APPLIES

Commercial and Industrial Environments

- Industrial Plants & Refineries
- Gas Godowns & Distribution
- Laboratories & Pharma
- Chemical Storage
- Boiler Rooms & Utilities
- Commercial Kitchens
- Hotels & Malls
- Hospitals & Institutional

Gas Transmitters



MODEL CI-1100

Combustible Gas Transmitter — LED Indication

LPG, propane and methane monitoring for commercial and light industrial premises

- Detection range 0–100% LEL; alarms above 10% of the lower explosion limit
- Self-purging semiconductor sensor — no routine recalibration required
- SPDT (Form C) alarm relay and SPST (Form A) trouble relay; installer-selectable latching or self-restoring
- Cast aluminium alloy flameproof enclosure with SS316 sensor housing, IP66, M20 cable entries
- 12–28 VDC / VAC, under 3 W · 120 × 90 × 90 mm · 1 kg · -10 °C to 55 °C · covers up to 900 sq ft

PESO CERTIFIED | CIMFR / CMRI | IP66 | IEC 60079-0 | IEC 61508

MODEL CI-2200

Digital Gas Transmitter — Display & 4–20 mA Output

Industrial monitoring with live concentration readout and plant integration

- Digital display of gas concentration in PPM, % LEL or % V/V
- Industry-standard 4–20 mA analog output plus RS485 digital communication for PLC or SCADA
- Accuracy ±2% of full scale; span and zero calibration functions
- Explosion proof and weather proof; cast aluminium alloy or SS316, IP66
- 12–28 VDC (typically 24 VDC), under 3 W · 120 × 100 × 100 mm · 2 kg · -20 °C to 60 °C

PESO CERTIFIED | CIMFR / CMRI | 4–20 mA | RS485 | IP66

Control Panels & Field Devices

Model	Specification
CI-GCP-2CH / 4CH / 8CH Microcontroller panel	Zone-wise fire, open and short LED indication with zone-wise testing; mains, AC fail, fuse and charging indication; zone isolation and password protection; RS485 for repeater and mimic panels. 220 VAC ±10% / 24 VDC 2.5 A · hooter output 2 A at 24 VDC · EOL 4k7 Ω per zone · 1.8 mm CRCA powder-coated housing, 272 × 346 × 96 mm, 4.5 kg
CI-GCP-SmartGuard Addressable digital panel	Accepts 4–20 mA or RS485 input from field transmitters; 7-segment display, optionally 4.3" LCD touchscreen or 7" HMI; programmable 0–9999 reading % LEL, PPM or % V/V; resolution 0.01 / 0.1 / 1; channel capacity 2, 4, 6, 8, 16 or 32; ModBus optional; two relay outputs at 24 VDC; MS housing
Hooter-cum-flasher & solenoid shut-off	Combined audible and visual annunciation at minimum 85 dB, distinct from the fire alarm tone. Solenoid gas valve driven from the panel relay closes the supply on alarm. Four relay outputs: hooter, solenoid valve and two user-configurable. Battery backup standard; GSM module optional

Approvals are held by the manufacturer of the equipment supplied; certificate copies provided with every consignment. One-year standard warranty on panels.

Choosing Between the Two Transmitters

Parameter	CI-1100	CI-2200
Readout	LED indication — power and gas leak	Digital display of live concentration
Output	Relay contacts	4–20 mA analog plus RS485 digital
Best for	Kitchens, godowns, boiler rooms, commercial premises	Plants, refineries, laboratories, PLC or SCADA integration

Survey. Supply. Install. Service.

Free Site Survey
We assess the gas zone, count detector positions and issue a full specification and itemised BOQ, free of charge.

Installation
Commissioned with our authorised licensed partner agency, who issues the statutory compliance certificate.

Calibration & AMC
Six-monthly detector function testing and calibration, with a written service record for your file.

UNITY FIRE SAFETY

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Book a Free Site Survey

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Send a floor plan, gas zone drawing or equipment list — or call and we will visit. Written specification, itemised BOQ and quotation, with no obligation.