

TECHNICAL DATA SHEET



GAS LEAKAGE ALARM PANEL – 2/4/6/8 ZONE

Brief description: The Gas Leakage Alarm Panel is a reliable and user-friendly central control unit designed for detecting and alerting in case of gas leaks. Built to comply with ERTL Standards, this panel is suitable for industrial and commercial environments requiring continuous gas leak surveillance. It supports connection with gas leak detectors, manual call points and audio-visual indicators such as hooters or bells. Each zone operates independently and can be disabled manually if required.

1. GENERAL DATA :-

Manufacturer	Palladium Safety Solutions Pvt. Ltd.
Trade Mark/Brand	“PALEX”
Type	Gas Leakage Alarm Panel



2. TECHNICAL SPECIFICATIONS :-

2.1 :- Electrical Specifications

AC Input	220V AC, 50/60Hz, Tolerance: +10% / -15%
DC Output	24 V DC typical
Voltage for MCU	5 V DC
Standby Current (PSE)	450 mA
Maximum Current (PSE)	1A (excluding battery charging)
Battery Charging Current	Max 1.85A, current -limited
Auxiliary Output	24 V DC $\pm$ 10%, 100mA max, current-limited, monitored

2.2 :- Battery Specifications

Battery Type	2 x 12V / 7Ah sealed lead-acid gel, self-regulated
Low-Voltage Cutoff	21V

2.3 :- Zone and Detector Capabilities

Detectors Allowed per Zone	20 (excluding MCPs)
Zone Alarm Current	6mA minimum / 27mA maximum

2.4 :- Outputs

Sounder Output	2 x 0.75A
Fire Relay	1A / 30V DC maximum
Fault Relay	1A / 30V DC maximum

2.5 :- Communication

Protocol	2-wire RS485 bus system
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2.6 :- Fuses

AC Power Fuse	1A / 250V, 5 x 20mm glass tube
DC Power Fuse	1A / 250V, 5 x 20mm glass tube

2.7 :- Environmental Conditions

Temperature	-5°C to +40°C (23°F to 104°F)
Humidity	5% to 95% RH, non-condensing
Environmental Class	Class A

2.8 :- Terminal Specifications

Terminal Block Rating	Suitable For 12 to 19AWG (0.75-2.5 mm ²)
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3. KEY FEATURES :-

- Gas Leak Detector Inputs – Supports up to 2 detectors per zone
- Zone Availability – Options for 2, 4, 6, and 8 zones.
- Alarm Device Outputs – Dual bell/fire relay and fault relay outputs.
- Auxiliary Power Output – 24V DC with 100mA current limiting and resettable protection.
- Automatic Power Switching – Seamless switch between mains power and backup battery.
- Intuitive Controls – Independent buttons with indicator LEDs for easy operation.
- Access Control – Multiple access levels for enhanced security.
- Fault Supervision – Real-time monitoring for inputs, outputs, power, fuse, and system status.
- Zone Disablement – Manual control to disable individual zones.
- Evacuation Mode – Fire Drill simulation for emergency preparedness.
- Silence Function – Mutes buzzers and sounders during alerts.

4. APPLICATIONS :-

- Industrial Facilities – Chemical plants, gas filling stations, manufacturing units.
- Commercial Kitchens – Hotels, restaurants, food processing units.
- Laboratories – Research centers and testing labs using flammable gases.
- Residential Complexes – Apartments and gated societies with centralized gas lines.
- Boiler and Utility Rooms – Power generation and heating installations.
- LPG/CNG Storage Areas – Warehouses, bottling plants, or vehicle fueling stations.

5. COMPLIANCE AND CERTIFICATION :-

Design Standard

ERTL Compliant

Company Certification

ISO 9001:2015 Certified

6. WARRANTY :-

- Warranty Period – 1 Year from the date of invoice.
- Coverage – Covers manufacturing defects and failures under normal usage conditions.
- Exclusion – Warranty does not cover damage due to :-
 - Improper installation or handling
 - Physical damage or tampering
 - Use beyond specified electrical limits
 - Natural disasters or accidents.

PALLADIUM SAFETY SOLUTIONS PVT. LTD.

An ISO 9001 : 2015 Certified Company

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