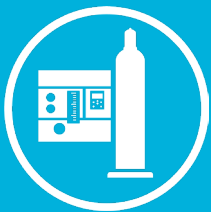




Self-testing gas detection system provides reliable monitoring of the concentration of chlorine gas in ambient air



Economical, low maintenance and reliable gas leak detection. Meets the requirements of Australian Standard AS2927: 2019 The storage and handling of liquefied chlorine gas



According to AS 2927 The storage and handling of liquefied chlorine gas; leak detectors shall be installed in chlorination rooms and where chlorine is connected for use

The system includes an audible horn, individual receiver modules, a power supply unit and battery back-up unit all pre-wired and tested for ease of installation. Sensor transmitters for location in areas where gas leakage or build-up might occur provide the basic measurement for the system.

Receiver module

Receiver modules provide an interface between the detection system and external alarming and data logging requirements. One module is used with each sensor/transmitter and includes a variety of features:

- LED display - indicates gas concentration directly in PPM
- Analogue output - an isolated 4-20mA output
- Two alarm setpoints - provided for warning personnel of different levels of leakage
- Three alarm relays - configurable and assignable gas alarm relays for external alarming if required
- Trouble alarm and relays - for sensor fault indication
- Acknowledge/reset switch - for alarm acknowledgement and reset functions

Display	4 digit LED, sunlight readable
Input	Digital signal, 2 wire connection to remote sensor/transmitter
Output	Isolated 4-20mA DC, 1000 ohms maximum load
Alarms	Two adjustable concentration alarms, set points adjustable from 5-100% of range
Alarm indicators	High intensity LED bars for WARNING (low setpoint) and ALARM (high setpoint)
Indicator function	WARNING indicator non-latching, ALARM latching
Alarm relays	Three assignable alarm relays, 5A, 250VAC (10A, 120VAC) resistive alarm relays assignable to either alarm set point
Relay function	Configurable for normal/fail-safe, latching/non-latching, and fast/slow operation
Relay and indicator reset	Activated from front panel switch or through remote reset
Trouble alarm	Front panel LED indicator and SPDT, 5A, 250VAC (10A, 120VAC) resistive relay; Relay factory set to fail-safe operation
Trouble function	Indicates loss of sensor/transmitter input or failure or sensor auto-test (if in use)
Gas indicator	LED bar on front panel with gas symbol overlay
Operating temperature	-40°C to +55°C
Humidity	0-99% non-condensing

Sensor/transmitter

The sensor/transmitter provides the gas measurement function for the system and consists of a stable electrochemical gas sensor which generates a signal linearly proportional to gas concentration.

Sensor/transmitters are housed in shielded IP56 enclosures for use in almost any industrial environment and are designed to meet intrinsic safety standards. The Auto-Test feature ensures the sensor is regularly tested.

Transmitter type	Two wire system, current pulse position signal
Sensor	Electrochemical gas diffusion type (manufactured by ATI)
Accuracy	Generally ±5% of value, but limited by available calibration of gas accuracy
Zero drift	Sensor dependent but normally less than 2% per month, non-cumulative
Enclosure	NEMA 4X polystyrene
Electrical connection	Quick disconnect terminal blocks (two wires without polarity)
Connection distance	Up to 300m to receiver
Operating temperature	-25°C to +55°C (-5°C for oxygen)
Humidity	0-95% non-condensing
Option	Sensor auto-test
Power	12 VDC from receiver module

Power supply

Input voltage	170-264 VAC, 50/60Hz
Output voltage	Regulated 12 VDC

Battery back up

Battery	12 VDC, 4 Ampere hour
Charge control	Current limited to .75 A Max.
Low voltage cut off	Relay disconnected at 10 VDC
Fault protection	Relay disconnected on shorted charger wiring

Auto-test verification

Analogue	Alarm relays inhibited and held at 4.6mA to verify test
Digital	Trip alarm module for digital auto-test verification – required if analogue monitoring capacity is not available at the site

