

Specifications for the Hydro Instruments
Model GA-171 Gas Alarm
Specification GA-171

1.01 GENERAL

1.01.1 Completeness

The system shall be complete with all components, equipment, and appurtenances.

1.01.2 Quality Assurance

All materials and components shall be new and unused of first quality by well-known manufacturers. Inferior materials or components shall not be allowed.

1.02 MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA or approved equal. The gas alarm shall be Hydro Instruments Model GA-171.

1.03 GAS DETECTOR

1.03.1 General

1. The Chlorine Gas Detector shall be a device including a monitor and up to two electrochemical gas sensors.
2. The Chlorine Gas Detector shall include a microprocessor-based monitor operating electrochemical sensors.
3. The microprocessor-based monitor shall be enclosed in a NEMA 4X (IP66) rated housing. The monitor shall include a two (2) line twenty (20) character, alphanumeric, backlit, liquid crystal, display, two LED's for normal and alarm conditions and four front panel push buttons. Alteration of the Gas Detector settings shall be password protected.
4. The electrochemical gas sensors shall be mounted in weatherproof enclosures.
5. Twenty-five (25) feet of shielded signal cable shall be provided to connect each sensor to the monitor. A six (6) foot long power cord shall be provided to connect the monitor the AC Power.
6. The Gas Detector shall accept any AC power source in the range of 90 to 255 Volts at 50 to 60 Hz.

1.03.2 Alarm Relay

1. The monitor shall provide one common alarm relay.
2. The high-level alarm relay shall be user selected as either latching or non-latching.

1.03.3 Gas Sensors

1. The Chlorine gas sensor shall be an electrochemical type having a range of 0.0 to 10.0 PPM and a resolution of 0.1 PPM.
2. The Chlorine gas sensor shall have an 80% response time of sixty (60) seconds or less.

1.03.4 Additional Features

1. The gas detector monitor shall include a dedicated analog (4-20 mA) output signal for each sensor.
2. The gas detector shall provide an RS-232 digital output signal to allow external recording of the gas sensor reading.