



# CAPITAL CONTROLS® Series 610 Gas Detector

## Gas Detection Made Easy

### Introduction

The Capital Controls® Series 610 gas detector offers a variety of features to meet your gas detection needs. A graphical LCD display provides clear indication of gas concentration and system status. Easy to use software controlled with a 4-push button user interface makes operation quick and efficient.

Smart sensors and auto-test functionality sets the Series 610 gas detector apart from the competition.

The smart sensor maintains its own unique calibration data within the sensor element. This allows for easy installation of factory calibrated sensors that are ready to be used. For maintenance in the field, the sensor element can be pre-calibrated in a workshop environment eliminating the need to take calibration gasses out to installation sites. The calibrated sensor is then just simply plugged into the field mounted device to complete the scheduled maintenance while reducing gas detector downtime.

The optionally available auto-testing feature provides assurance that the detector is always ready should a leak occur. The generator test cell produces a small quantity of gas right below the sensor element to verify the sensitivity to gas. Testing can be scheduled to occur at a preset time every day or week with the results logged allowing for seamless automatic testing functionality.

Additional features include 3 digital outputs, a 4-20 mA current output for gas concentration and serial communications capability via RS-485 over MODBUS protocol.





## Series 610 Gas Detector Features

- Graphic LCD display with 4-button user interface
- Intuitive menu driven software for easy setup and operation
- Smart Sensor which internally saves calibration and setup information
- Optionally available sensor test function which automatically validates sensor sensitivity
- Built-in data logger
- On-screen alarm and sensor over range indication

## Technical Data: Transmitter

### Power Supply Input:

- 120 or 240 Vac, 50-60 Hz single phase
- Power Consumption: 6 Watts

### User Interface:

- LCD graphic display
- Integral 4-button keypad below display

**Digital Inputs:** (1) digital input available for remote reset function

**Digital Outputs:** 3 relay outputs, 230Vac 5A or 30Vdc

**Analog Output:** 4-20 mA/into 600-ohm load

**External Communications:** Serial Communications via RS-485 via MODBUS protocol

**Enclosure Protection:** IP65 and NEMA 4X

**Overall Dimensions:** H 6" (152 mm) x W 5.56" (141 mm) x D 6.7" (170 mm)

**Weight:** 2.7 lb. (1.22 kg)

**Operating Temperature:** From 14°F to 140°F (-10°C to 60°C)

**Relative Humidity:** Up to 95%

## Technical Data: Sensor

**Gasses Available:** Chlorine, Chlorine Dioxide, Sulfur Dioxide, Ammonia, Ozone, Hydrogen, Oxygen

**Measuring Range:** Dependent on sensor selected

**Type:** Electrochemical

**Accuracy:** Generally,  $\pm$  5-10% of value limited by available calibration gas accuracy

**Operating Temperature Range:** -4°F to 140°F (-30°C to 60°C)

**Minimum Operating Temperature for O<sub>2</sub> sensor:** 14°F (-10 C)

**Operating Humidity Range:** 10% to 95% R.H. (Non-Condensing)

**Connection Requirements:** 4-conductor, shielded, 22 AWG cable

**Maximum Separation between Receiver and Sensor:** 100 feet (30.48 meters)

**Enclosure:** NEMA 4x, IP65

**Mounting:** Wall or pipe mount bracket

**Overall Dimensions:** H 6.57" (167 mm) x W 6.0" (152 mm) x D 3.70" (94 mm)

**Weight:** 1.44 lb. (.65 kg)



## Capabilities:

De Nora Water Technologies is ISO 9001 certified to provide quality and precision materials. Disinfection technologies, water quality monitors and instrumentation for water and wastewater are areas of specialization. Over 50 years of industrial and municipal application experience in the water and wastewater industries is incorporated into the equipment design to provide high quality comprehensive solutions for the global market.

