



Dependable Gas Analysis Solutions

540 SERIES CHLORINE ALARM MONITORS



APPLICATIONS

Designed for the continuous monitoring of extremely low (0-1.00 PPM) levels of chlorine (Cl_2) and chlorine dioxide (ClO_2) in ambient air in water treatment plants, chlorine production plants, commercial swimming pools, or any area in which chlorine is handled or stored.

FEATURES

- Wet electrochemical cell; no periodic cell replacement necessary
- Fast response to the presence of chlorine in the air ($T_{90} < 3$ seconds)
- Instant warm up, no wait
- Bright digital readout - no reading interpretation errors
- Display changes color with alarm levels
- Built-in 'Sonalert' audible alarm
- Two levels of audible alarm: 'Alert' and 'Alarm' - can be silenced with 'Acknowledge' button
- Easy use, calibrate, and maintain
- 4-20mA output signal for recording
- Built-in sample pump allows sampling from remote location
- Corrosion resistant NEMA 4X wall mounted enclosure

OPTIONS

- 'Fail Safe' alarms available
- Strobe light
- Low flow alarm on 540P
- Permeation tube calibrator
- Cold weather package for operation to -5°F (-20°C)



CALIBRATION

- On clean air or nitrogen for Zero
- On analyzed chlorine gas in nitrogen for Span

NOVA ANALYTICAL SYSTEMS INC.

www.nova-gas.com

DESCRIPTION

The Nova 540 Series chlorine alarm monitor is designed for the continuous detection of low levels of Cl_2 in ambient air. The Cl_2 sensor is of the wet electrochemical type and is capable of excursions over 100 PPM with no damage. It has an expected life of approximately 10 years and is ready to go as soon as the monitor is turned on. The wet electrochemical cell quickly responds to low PPM levels of Cl_2 . It will also respond to chlorine dioxide (ClO_2); if both gases are present in sample, the analyzer will report the sum of both gases. After many years of operation, the sensor can be returned to Nova for refurbishment and will perform like new again.

The 540P need not be placed directly in the area to be monitored. The built-in sample pump will draw in the sample from as far away as 100ft. (33m). The customer only needs to top up the electrolyte solution in this alarm monitor approximately once every two months. This electrolyte solution can easily be made up by the customer.

MODELS

- 540D - Diffusion type sensor
- 540P - Built-in sample pump to draw in sample from another location

SPECIFICATIONS

Nova reserves the right to specification changes which may occur with advances in design without prior notice.

Description	
Method of Detection:	Wet electrochemical cell that responds to Cl_2 & ClO_2
Ranges Available:	Customer to specify a range between 0-1.00 and 0-19.99 PPM
Resolution:	0.01 PPM
Accuracy and Repeatability:	Better than 1% of full scale or 0.02 PPM, whichever is higher
Drift:	Less than 1% of full scale or 0.02 PPM per week, whichever is greater
Response Time (T-90):	less than 3 seconds to 90% step change
Ambient Temperature Range:	32° to 120°F (0° to 40°C), may be operated at lower temperature with auxiliary heater
Linearity:	± 1% of full scale or 0.1 PPM, whichever is higher
Size and Weight:	14" H x 12" W x 8" D @ 18lbs (35.6 x 30.5 x 20.3 cm @ 8.2 kg)
Power:	115VAC 60Hz (220VAC 50Hz available)
Output Options:	0-1VDC or 4-20mA
Alarms:	Dual high Cl_2 alarm light and relays (SPDT - 5A@ 230VAC) Audible alarm with 'Acknowledge' button

UNIQUE APPLICATIONS

All Nova analyzers are built using proven technologies and techniques. If this product does not suit your application, please contact Nova at 1-800-295-3771. In many cases, we are able to build an analyzer specific to your needs.



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