# CALIBRATION TECHNOLOGIES INC.

# Specialists in Gas Detection

Authorized Distributor: GasDetectorsUSA.com Houston, TX USA 832-615-3588 sales@GasDetectorsUSA.com

# GASGUARD CI2

# **CHLORINE SENSOR**



### **Key Features**

- Electronics completely potted to prevent corrosion in harsh, wet environments
- Chlorine specific electrochemical sensor technology. Absolutely no false alarms
- Industry standard linear 4/20 mA output
- Corrosion, weather and chemical resistant polycarbonate sensor enclosure
- Electronics completely sealed in potting compound to protect against corrosion
- Intelligent-design enclosure temperature control for improved cell life
- Sensor designed to adapt to any harsh environment from -20°F to +120°F
- Real-time continuous monitoring for early detection of toxic concentrations.
- Accurately monitor OSHA's PEL, STEL and IDLH setpoints for personnel protection
- Detectable range: 0-5 ppm

# Toxic chlorine gas detection designed 'food industry' tough

The GasGuard Cl2 utilizes proven electrochemical sensor technology for fast and accurate detection. The standard detection range of the GasGuard Cl2 provides real-time continuous monitoring of hydrogen concentrations accurately down to 0.5 ppm, with no false alarms. The intelligent internal temperature control of the GasGuard Cl2 provides optimum temperature control for extended cell life. The high-quality injection-molded polycarbonate enclosure offers excellent chemical corrosion protection and high impact resistance. The GasGuard Cl2 provides an industry standard linear 4/20 mA output signal compatible with most gas detection systems and PLCs. The output signal is not affected by drastic temperature variations or other atmospheric conditions.

# Applications

- Process areas
- Tank storage
- Injection systems
- Semiconductor
- Sanitizing systems
- Air monitoring

## **Benefits**

- Easy to order
- Low cost
- Simple operation
- Rugged and reliable

# GASGUARD CI2

### One sensor for any environment = low cost & easy ordering

The standard **GasGuard Cl2** sensor is designed to work anywhere, and at a lower base-model price than most of our competition. With only one electrochemical sensor for any application, designing, ordering and maintaining your chlorine detection system is less hassle.

### Designed "Food Industry" tough

The **GasGuard Cl2** is prepared to survive in just about any harsh industrial condition, including acid washdown of processing areas. Every circuit board is sealed forever in potting compound, protecting electronic components and copper tracing from corrosion. A specially vented chemical-resistant polycarbonate enclosure protects the sensor from accidental damage, weather and even direct hose-hits from clean-up crews.

## **Ordering Information**

The **GasGuard Cl2** is delivered calibrated and ready to install. Use the model numbers below to order.

#### GG-Cl2

**GG-CL2-ST** (with stainless steel enclosure) **GG-Cl2-RC** (replacement cell)





### SPECIFICATIONS

**DETECTION PRINCIPLE:** Electrochemical

**DETECTION METHOD:** Diffusion

GASES: Chlorine (Cl2)

RANGES: 0/5 ppm

OUTPUT SIGNAL: Linear 4/20 mA (max input impedance: 700 Ohms)

Power Supply: +24 VDC, 350 mA

#### DUE TO ONGOING RESEARCH AND PRODUCT IMPROVEMENT, SPECIFICATIONS ARE SUBJECT TO CHANGE

#### **RESPONSE TIME:**

 $T_{50}$  = less than 60 seconds  $T_{90}$  = less than 120 seconds

#### ACCURACY:

+/- 5% of value, but dependant on calibration gas accuracy and time since last calibration

ZERO DRIFT: Less than 0.1% of full-scale per month, noncumulative

SPAN DRIFT: Application dependant, but generally less than 3% per month

LINEARITY: +/- 0.5% of full-scale

**REPEATABILITY:** +/- 1% of full-scale

#### WIRING CONNECTIONS:

3 conductor, shielded, stranded, 20 AWG cable (General Cable C2525A or equivalent) up to 1500 ft.

#### ENCLOSURE:

Injection-molded NEMA 4X polycarbonate Hinged lid with captive screw. For non-classified areas.

**TEMPERATURE RANGE:** -20°F to +120°F (-29°C to +49°C)

HUMIDITY RANGE: 5% to 100% condensing

DIMENSIONS: 7.5" high x 6.5" wide x 3.75" deep

WEIGHT: 2 lbs