

# CR-4000

"The Independent"

**BW** Technologies  
by Honeywell

## Four Channel Gas Detection Controller



Loop Powered  
Provides 24 VDC  
power to the gas  
sensing transmitter

Now  
Class I, Division 2  
Approved!



### FEATURES:

For continuous monitoring and control of toxic gases, combustible gases and oxygen hazards, the CR-4000 is designed for installation and operational simplicity.

- ▲ Individual, continuous, alphanumeric "status" LCD for each channel
- ▲ Slim profile: depth only 2.5 inches / 6.35 cm
- ▲ Wall mount installation
- ▲ Local 85 dB audible alarm
- ▲ Field programmable alarm levels on each channel
- ▲ Simple operation
- ▲ Mix, match or change the gases monitored
- ▲ Three standard common, 10 amp SPDT relays. Low, High and Fault general Alarms
- ▲ Up to eight additional discrete relays optionally available - two per channel for LOW and HIGH alarms. Each channel is programmable for energized/de-energized, latching/non-latching and audible ON/OFF
- ▲ Multi-functional external RESET. Can be used to reset or cancel all latched alarms; displays Peak (maximum) gas detected on each channel and tests all audible/visual alarms
- ▲ Accepts 4-20 mA signal input from any 4-20 mA gas transmitter

## Fixed Gas Monitoring Systems

### Ordering Information

CR-4000 4-20 mA AC/DC Controller with common relays (fault, low and high alarm)

#### Accessories and Options

CR4-R1000 4-20 mA AC/DC Controller with common relays plus discrete relays, low and high, on Channel 1

CR4-R1200 4-20 mA AC/DC Controller with common relays plus discrete relays, low and high, on Channels 1 & 2

CR4-R1230 4-20 mA AC/DC Controller with common relays plus discrete relays, low and high, on Channels 1, 2 & 3

CR4-R1234 4-20 mA AC/DC Controller with common relays plus discrete relays, low and high, on Channels 1, 2, 3 & 4

Note: Discrete relays 10 amp SPDT discrete low and high alarm relays

CR4-BAT1 Battery Back-up (110/220 VAC or 24 VDC)

CR-ALH05 External Audible/Visual Alarm

#### Compatible with BW 4-20 mA Gas Transmitters

GasPoint  
GasPoint IR  
RRJ Series

**ISO**  
ISO9001:2000  
Registered

[www.gasmonitors.com](http://www.gasmonitors.com)

e-mail: [info@gasmonitors.com](mailto:info@gasmonitors.com)

# CR-4000

## Four Channel Gas

### Detection Controller

Simply select the pre-programmed channel switch for:

- △ Gas type
- △ Sensor range
- △ Alarm level

Standard Common Relays (included)  
High alarm, Low alarm and Fault

### Special Features

**Records and Displays** Peak (Max) gas detected by each channel on demand.

### Auto Fuses protect all circuits.

Fuses reset automatically when the circuit power returns to normal. No fuse replacement required.

### Accessories and Options

#### Relays (up to eight)

Two (2) factory installed 10 amp SPDT relays per channel. The Low Alarm/High Alarm independent discrete relays are user adjustable for power and assignment, including normally energized/de-energized, latching/non-latching and audible alarm activation.

#### Battery Backup

The two (2) 1.2 amp hr., 12 volt batteries can be installed at any time in the field.

Select from either of BW's 4-20 mA gas transmitters:

- GasPoint
- RRJ

### Gas Detection Measuring Ranges

Combustibles: 0-100% LEL

O<sub>2</sub>: 0-25% v/v

H<sub>2</sub>S: 0-20, 0-50, 0-100, 0-500 ppm

CO: 0-50, 0-100, 0-200, 0-500, 0-1000 ppm

SO<sub>2</sub>: 0-10, 0-20, 0-50, 0-100 ppm

NH<sub>3</sub>: 0-50, 0-100 ppm

Cl<sub>2</sub>: 0-5.0, 0-10.0, 0-100 ppm

HCN: 0-20.0, 0-50.0, 0-100 ppm

NO: 0-50, 0-100 ppm

NO<sub>2</sub>: 0-10.0 ppm



### For further information:

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## SPECIFICATIONS

**POWER:** Field selectable for AC (115 and 230 VAC) or DC (24 VDC)  
AC Input: 110 VAC 50-60 Hz standard; 220 VAC 50-60 Hz  
DC Input: 24 VDC (18 to 28 VDC)  
Backup: Optional battery backup 24 VDC supply. Approx. 3 hours in normal operation

### ENVIRONMENTAL

Operating Temperature: -4 to +122°F/-20 to +50°C  
Relative Humidity: 5 to 99% non-condensing  
Enclosure Rating: Nema 12

### PHYSICAL

Dimension (dwxh): 2.4 x 13 x 9.5 inches/6 x 33 x 24 cm  
Weight: 4.85 lb./2.2 kg  
Enclosure: Enameled steel RFI/EMI protected  
Wire Terminations: Screw type terminal blocks  
Wiring Ports: Seven (7) each 3/4 inch/22 mm NPT ports  
Mounting: Wall mounted—equipped with hanging slots and hinged door

### ALARMS:

Two set points per channel (user programmable)

Audible: 85 dB buzzer

### OUTPUTS:

SPDT relays; 10 amp @ 110 VAC/24 VDC, 8 amp @ 230 VAC  
Standard: One (1) common low gas alarm, de-energized, non-latching  
One (1) common high gas alarm, de-energized, latching  
One (1) common fault alarm, normally energized, non-latching  
Optional: Two (2) per channel; one (1) low gas and one (1) high gas alarm  
Field selectable: energized/de-energized; latching/non-latching and audible alarm ON/OFF

### DISPLAY PANEL

Backlit LCDs: Four (4) independent 3 digit alphanumeric status displays  
Field selectable readouts for: %LEL, ppm and/or O<sub>2</sub> % v/v.

LED Indicators:

Alarms: Three (3) - "LOW" (red), "HIGH" (red), "FAULT" (amber)  
Power: Two (2) "ON" AC icon (green), DC icon (green)  
Gas: Concentration icons-ppm, %LEL, %O<sub>2</sub>,

### CONTROLS:

Two (2) large pushbuttons: Alarm Reset/Acknowledge, Peak Exposures,  
Lamp Test (audible/visual alarm test)  
Alarm setpoints: simple up/down buttons

### WARRANTY:

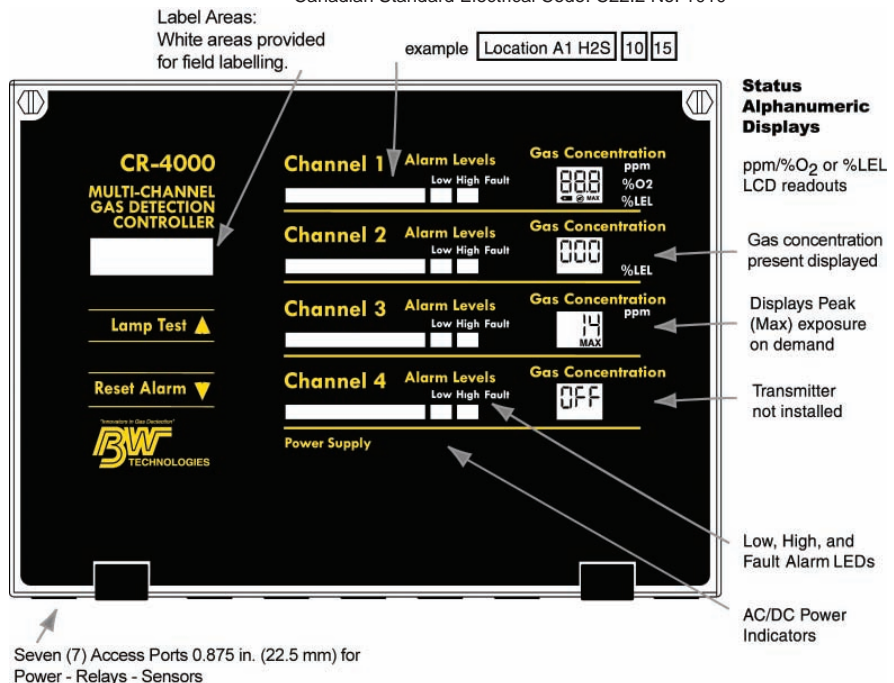
Two (2) years non-prorated

*DUE TO ONGOING RESEARCH AND PRODUCT IMPROVEMENT, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.*

### RATINGS AND CERTIFICATIONS: (INTRINSICALLY SAFE W/ BARRIER)

Ordinary location approved  
Class I, Div 2, Groups A,B,C,D approved  
model available  
International Electrical Code: IEC No. 61010  
U.S. Standard: ANSI/ISA S82.01  
Canadian Standard Electrical Code: C22.2 No. 1010

CE - conforms to European  
Union directives



Locally distributed by:

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www.gasmonitors.com

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