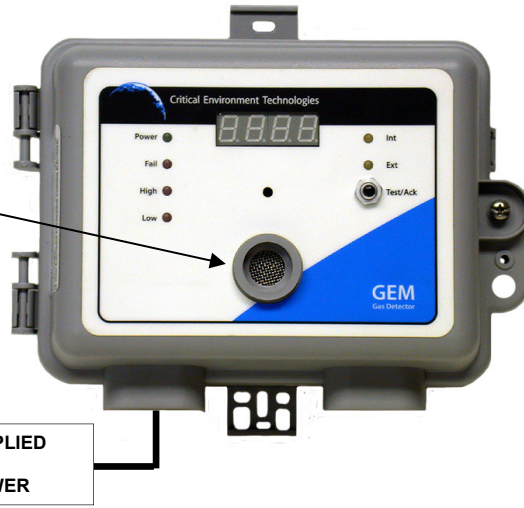


# Critical Environment Technologies Canada Inc.

www.critical-environment.com

## GEM Type "E" 2-Channel Self-Contained Gas detector Low Voltage Installation Drawing for Parking Garage Applications for CO & NOX (diesel exhaust) Rev-A October 15, 2010



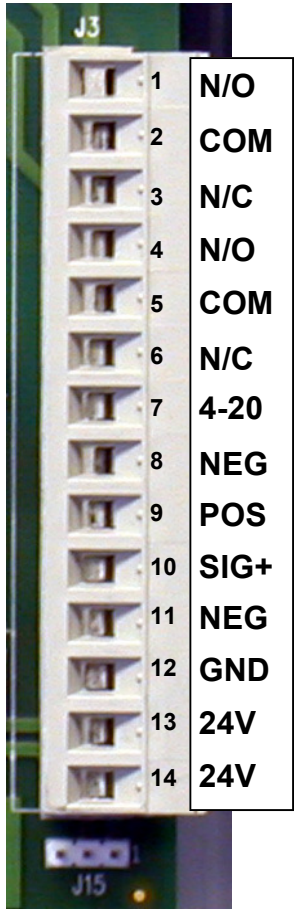
GEM TYPE "E" 2-CHANNEL SELF-CONTAINED GAS DETECTION SYSTEM. ONE INTEGRAL CO SENSOR AND ONE INTEGRAL NOX SENSOR

**NOTE:** THIS PHOTO SHOWS THE OPTIONAL LED DIGITAL DISPLAY

GEM MOUNTING HEIGHT 4' TO 6' FROM THE FLOOR "BREATHING ZONE"

INSTALLER SUPPLIED LOW VOLTAGE OPERATING POWER

**WIRING TERMINATIONS:** DO NOT USE SOLID-CORE WIRE. ANY DAMAGE CAUSED BY USE OF SOLID-CORE WIRE WILL VOID WARRANTY. USE STRANDED WIRE ONLY



|    |      |                               |
|----|------|-------------------------------|
| 1  | N/O  | RELAY-1 (LOW ALARM)           |
| 2  | COM  | RELAY-1 (LOW ALARM)           |
| 3  | N/C  | RELAY-1 (LOW ALARM)           |
| 4  | N/O  | RELAY-2 (HIGH ALARM)          |
| 5  | COM  | RELAY-2 (HIGH ALARM)          |
| 6  | N/C  | RELAY-2 (HIGH ALARM)          |
| 7  | 4-20 | 4-20 ANALOG OUTPUT, CH-1      |
| 8  | NEG  | NEG. ANALOG OUTPUT, CH-1      |
| 9  | POS  | NOT USED                      |
| 10 | SIG+ | 4-20 ANALOG OUTPUT, CH-2      |
| 11 | NEG  | NEG. ANALOG OUTPUT, CH-2      |
| 12 | GND  | INCOMING POWER: 24VDC         |
| 13 | 24V  | INCOMING POWER: 24VDC / 24VAC |
| 14 | 24V  | INCOMING POWER: 24VAC         |

**NOTE:** TWO INTERNAL DRY CONTACT RELAYS ARE RATED 5-AMPS @ 240VAC EACH S.P.D.T.  
  
DO NOT RUN LINE VOLTAGE AND LOW VOLTAGE WIRES IN SAME CONDUIT

LOW VOLTAGE SIDE

LINE VOLTAGE SIDE

AVAILABLE OPTIONAL TOTALLY ENCLOSED TRANSFORMER ALLOWING 115VAC INCOMING AND OUTPUTTING 22VAC TO GEM SYSTEM

LOW VOLTAGE & LINE VOLTAGE ARE SEGREGATED INSIDE THIS TRANSFORMER

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