

# AFFORDABLE INFRARED CARBON DIOXIDE & TEMPERATURE MONITOR

## CEA 700

### FEATURES

- LARGE, EASY TO READ DIGITAL DISPLAY
- PATENTED DUAL BEAM, ABSORPTION INFRARED GAS SENSOR ENSURES LONG TERM STABILITY
- CO<sub>2</sub> READOUT UP TO 10,000 PPM (1%)
- TEMPERATURE SHOWN IN EITHER °F OR °C
- EASILY ADJUSTABLE FOR ALTITUDE CHANGES
- PLUG IN AC ADAPTOR FOR CONTINUOUS USE
- PORTABLE UP TO 80 HOURS WITH 4 AA BATTERIES
- VERY LOW COST WITH FAST, SIMPLE CALIBRATION
- COMPLETELY SELF CONTAINED, DURABLE AND LIGHTWEIGHT
- FLIP OUT STAND FOR DESKTOP MONITORING



The **CEA 700** is a hand held, compact, continuous CARBON DIOXIDE gas monitor with TEMPERATURE readout in either °F or °C. The **CEA 700** units are durable, reliable, and extremely easy to use and maintain. Each unit is equipped complete with a large digital display, AC power adapter, flip out stand, and operation manual. Standard Alkaline batteries last up to 80 hours for portable use. Many other unique features are included within the **CEA 700**. Other CO<sub>2</sub> monitors are available for most portable or wall mounted applications.



**CEA Instruments, Inc.**

*"EXPERTS IN TOXIC GAS DETECTION"*

## CEA 700 SPECIFICATIONS

|                                |  |
|--------------------------------|--|
| <b>SENSOR TYPE</b>             | Dual Beam Absorption Infrared  |
| <b>SAMPLE METHOD</b>           | Diffusion or flow through (50-100 ml per min)  |
| <b>DISPLAY</b>                 | LCD with independent Carbon Dioxide and Temperature readings (Panel buttons set elevation, °F/°C, and calibration functions) |
| <b>CARBON DIOXIDE RANGE</b>    | 0 - 10,000 ppm display (0 - 4,000 ppm voltage output)  |
| <b>SENSITIVITY</b>             | +/- 1 ppm  |
| <b>ACCURACY</b>                | +/- 50 ppm or +/- 5% of reading, whichever is greater  |
| <b>REPEATABILITY</b>           | +/- 20 ppm   |
| <b>TEMPERATURE DEPENDENCE</b>  | +/- 0.1% of reading per °C or +/- 2 ppm per °C, referenced to 25°C   |
| <b>PRESSURE DEPENDENCE</b>     | 0.13% of reading per mm Hg (Corrected via user input for elevation)  |
| <b>ANNUAL DRIFT</b>            | +/- 20 ppm typical   |
| <b>RESPONSE TIME</b>           | Less than 60 seconds to 90% of full scale  |
| <b>WARM-UP TIME</b>            | Less than 60 seconds at 22°C   |
| <b>OPERATING CONDITIONS</b>    | 32-122°F (0-50°C) and 0-95% RH, non-condensing   |
| <b>STORAGE TEMPERATURES</b>    | -40 to 140°F (-40 to 60°C)   |
| <b>CALIBRATION INTERVAL</b>    | 12 months, offset adjustment using CO <sub>2</sub> gas or full factory calibration   |
| <b>TEMPERATURE READOUT</b>     | 32 to 122°F (0 to 50°C) [voltage output goes up to 104°F (40°C)]   |
| <b>TEMPERATURE RESOLUTION</b>  | 0.1°F (0.1°C)  |
| <b>TEMPERATURE OPTIONS</b>     | °F, °C, or off. Set with panel button.   |
| <b>TEMPERATURE ACCURACY</b>    | +/- 2°F (+/- 1°C)  |
| <b>TEMPERATURE RESPONSE</b>    | Up to 20 minutes until case equilibrates with environment  |
| <b>TEMPERATURE CALIBRATION</b> | 12 months, offset adjustment using temperature standard at 50 to 86°F (10 to 30°C) or full factory calibration available     |
| <b>OUTPUT - ANALOG</b>         | Carbon Dioxide - 0-4 VDC, 1 mV/ppm (4,000 ppm max)<br>Temperature - 0-4 VDC linear, 32-104°F (0-40°C)                        |
| <b>OUTPUT IMPEDANCE</b>        | 100 Ohms   |
| <b>WIRING CONNECTION</b>       | Digital Output via RJ-45 to DB9 serial port cable  |
| <b>BATTERY</b>                 | Four (4) AA alkaline batteries for up to 80 hours operation  |
| <b>EXTERNAL POWER</b>          | 6 VDC from external AC/DC adapter, included  |
| <b>POWER REQUIREMENTS</b>      | 100 mA Peak, 20 mA average from 6V   |
| <b>WEIGHT</b>                  | 10.5 oz (297 g) with batteries installed   |
| <b>CERTIFICATION</b>           | FCC Class 15 Part B  |

(Specifications subject to change without notice.)



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## CEA 700 PRICE LIST

Hand held / wall mounted, compact, patented dual beam, absorption Infrared, continuous monitor for **CARBON DIOXIDE** with **TEMPERATURE** readout. Complete with AC power adaptor, AA batteries, auto-calibration operation, large digital display, flip out stand, and instruction manual.

Carbon Dioxide Display: 0 to 10,000 ppm (1%)

Temperature Display: 32 to 122°F (0 to 50°C)

**CEA 700.....\$ 795.00**