

## Online Carbon Dioxide Analyzer, IP66 / NEMA 4X Wall Mount Enclosure



Precision NDIR CO2 Sensor

F.S. Ranges of 0 -5000 ppm up to 0 - 100 %

Large Easy-to-Read Display

Intuitive User Friendly Menu Interface

Compact Indoor or Outdoor Enclosure

Cost Effective and Low Maintenance

Integral USB Data Logging

### Specifications:

|                           |                                      |
|---------------------------|--------------------------------------|
| Accuracy:                 | +/- 1% Full Scale Range*             |
| Calibration:              | Periodically                         |
| Alarms:                   | 2 Adjustable w/ delay mode           |
| Range ID:                 | 1 - 5 VDC (Optional 4 -20mA)         |
| Communication             | Bi-Directional MODBUS RS485<br>ASCII |
| Output:                   | 4 - 20mA                             |
| Data Logging:             | Removable USB Stick                  |
| Power:                    | 100 - 240 VAC or 10 - 28 VDC         |
| Classification:           | General Purpose                      |
| Display:                  | LCD with Backlight                   |
| Dimensions:               | 9.5 x 6.5 x 3.8 Inches               |
| Enclosure:                | Anodized Aluminum                    |
| Weight:                   | 4.4 lbs                              |
| Pressure:                 | 0.1 - 50 PSIG                        |
| Flow Rate:                | 0.5 - 5 SCFH                         |
| Temperature:              | 0 to 50° C                           |
| Temperature Compensation: | Integral                             |
| Sensor:                   | Precision NDIR Cell                  |
| Response Time:            | T90 in 30 Seconds                    |
| Gas Connections:          | Configurable                         |
| Sample System:            | Optional                             |
| Sensor Warranty:          | 12 months                            |
| Analyzer Warranty:        | 12 months                            |

### Applications:

- Natural Gas Extraction & Processing Pipelines
- Chemical Plants
- Landfill Gas Monitoring
- Biogas before and after the CO2 Scrubber
- And Many Other Industrial Applications

The CO2-525X offers the unique ability to log data in real time via a removable USB drive. Data is logged in an Excel compatible .csv file by date with an interval between 1 and 120 minutes.

Logging at intervals of 1 minute you can store up to approximately 50 years worth of data before filling up an 8GB USB flash drive.

"Inquiry for Application Expertise"

## CO2 Analyzer:

The model CO2-525X Carbon Dioxide analyzer combines a rugged design with SSO2's precision CO2 sensors. The result is a highly reliable and cost effective compact design with an easy-to-use user interface.

The output can be range selected through the on-board menu allowing easy interface with a PLC, DCS or other control system.

Gas connections are made with compression tube fittings (1/8", 1/4" or 6mm).

## Integral Alarms Contacts:

2-non latching fully configurable Form C relay contact alarms.

## Power Requirements:

Input Power: 12 - 24 V DC  
Current Draw: 100 mA

\*\* Optional power input choices available

## CO2 Sensor Technology:

The Carbon Dioxide sensor used in the CO2-525X is based on the NDIR easurement cell principal. All CO2 sensors are manufactured under a strict quality program.

The sensors are self-contained and minimal main-tenance is required - no need to clean electrodes or add electrolyte.

The Southland Sensing precision CO2 sensors offer excellent performance, accuracy and stability while maximizing the expected life.

## CO2 Sensors:

CO2-1x Sensor 0 – 1000ppm, 2000ppm, 3000ppm, 4000ppm & 5000ppm

CO2-2x Sensor 0 – 1%, 2%, 3%, 4% & 5%

CO2-3x Sensor 0 – 5%,10% 25%, 50% & 100%

CO2-3x Sensor 0 – 100%, 50 – 100%, 70 – 100%, 80 – 100% & 90 – 100%

CO2 sensors should be periodically calibrated. Sensors offer excellent linear-ity when calibrated to a certified span gas.

## Order Information:

Record Part Number with selected options in Blank Indicated Area of Form

### Model Number:

CO2-525X Carbon Dioxide Analyzer

### Selected Range & Sensor:

- 1 CO2-1x Sensor 0 – 1000ppm, 2000ppm, 3000ppm, 4000ppm & 5000ppm
- 2 CO2-2x Sensor 0 – 1%, 2%, 3%, 4% & 5%
- 3 CO2-3x Sensor 0 – 5%,10% 25%, 50% & 100%
- 4 CO2-3x Sensor 0 – 100%, 50 – 100%, 70 – 100%, 80 – 100% & 90 – 100%

### Power Option:

- A 100 - 240 VAC Analyzer, 4-20 mA Analog Output, Integral Alarms, MODBUS RS485 ASCII  
D 10 - 28 VDC Analyzer, 4-20 mA Analog Output, Integral Alarms, MODBUS RS485 ASCII

### Gas Connections:

- 4 1/4" Compression Tube Fittings  
6 6mm Compression Tube Fittings  
8 1/8" Compression Tube Fittings

CO2-525X - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Use This Part Number When Ordering

\*\* For assistance when ordering, contact our inside sales specialist \*\*

## Carbon Dioxide Portable Analyzer with USB Data Logging



### Specifications

|                           |                               |
|---------------------------|-------------------------------|
| Accuracy:                 | < +/- 1% of Full Scale Range* |
| Calibration:              | Periodically                  |
| Output:                   | 0 - 1V DC                     |
| Data Logging:             | Removable USB Flash Drive     |
| Battery Indicator:        | Integrated into Large Display |
| Power:                    | Rechargeable                  |
|                           | Lead Acid Battery             |
|                           | 100 - 240 VAC Adapter         |
| Display:                  | Large with Backlight          |
| Dimensions:               | 10.9 x 10.0 x 4.9 inch        |
| Enclosure:                | Anodized Aluminum             |
| Weight:                   | 8.0 lbs                       |
| Pressure:                 | Inlet, 0.1 - 50 PSIG          |
| Flow Rate:                | 0.5 - 5 SCFH                  |
| Temperature:              | 0 to 50° C                    |
| Temperature Compensation: | Integral                      |
| Sensor:                   | Precision NDIR Cell           |
| Response Time:            | T90 in 30 Seconds             |
| Gas Connections:          | 1/8" Compression Tube         |
| Sample System:            | Flow Control, Flow Indicator  |
| Sensor Warranty:          | 12 months                     |
| Analyzer Warranty:        | 12 months                     |

\*Accuracy at constant conditions

### Precision NDIR CO2 Sensor

F.S. Ranges of 0 -5000 ppm up to 0 - 100 %

Large Backlit Display w/ User Friendly Menu

Continuous Analysis During Charging

Data Log Via Removable USB Flash Drive

The CO2-740 Carbon Dioxide analyzer combines a rugged portable design with SSO2's precision Carbon Dioxide sensors. The analyzer also has built in temperature and barometric pressure compensation; the result is a highly reliable and cost-effective design with easy-to-use interface.

A removable USB flash drive for data logging via .CSV (Excel) file format. With an 8GB USB Flash Drive, you can data log for 1-minute intervals for about 50 years before running out of storage. The advanced set of electronic features and flexibility to easily access data allows this analyzer to be unmatched in the market.

The display of the analyzer is designed to be used in direct sunlight. No need to bring a shade or other method to see the screen.

The Carbon Dioxide sensor used in the CO2-740 is based on the galvanic electrochemical fuel cell principal and is compensated for both pressure and temperature giving the user added accuracy. All Carbon Dioxide sensors are manufactured in house by Southland Sensing Ltd. under a strict quality program.

The sensors are self-contained and minimal maintenance is required - no need to clean electrodes or add electrolyte.

### Applications:

- Natural Gas Extraction & Processing Pipelines
- Chemical Plants
- Landfill Gas Monitoring
- Biogas before and after the CO2 Scrubber
- And Many Other Industrial Applications

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### Optional Accessories

|     |                                       |
|-----|---------------------------------------|
| CC  | Carrying case with custom foam insert |
| CF  | Coalescing filter with 0.1u filter    |
| SP  | Integral sampling pump                |
| REG | Pressure Regulator                    |
| HT  | High Temp Probe                       |

# CO2-740 CO2 Analyzer

# Product Specifications

## CO2 Analyzer:

The model CO2-740 Carbon Dioxide analyzer combines a rugged design with SSO2's precision CO2 sensors. The result is a highly reliable and cost effective compact design with an easy-to-use user interface designed specifically for the Natural Gas and Biogas industries.

Gas connections are made with compression tube fittings (1/8", 1/4" or 6mm).

## Power Requirements:

Input Power: 100 - 240 VAC Adapter  
International Plugs

## CO2 Sensor Technology:

The Carbon Dioxide sensor used in the CO2-740 is based on the NDIR easurement cell principal. All CO2 sensors are manufactured under a strict quality program.

The sensors are self-contained and minimal maintenance is required - no need to clean electrodes or add electrolyte.

The Southland Sensing precision CO2 sensors offer excellent performance, accuracy and stability while maximizing the expected life.

## CO2 Sensors:

CO2-1x Sensor 0 – 1000ppm, 2000ppm, 3000ppm, 4000ppm & 5000ppm

CO2-2x Sensor 0 – 1%, 2%, 3%, 4% & 5%

CO2-3x Sensor 0 – 5%,10% 25%, 50% & 100%

CO2-3x Sensor 0 – 100%, 50 – 100%, 70 – 100%, 80 – 100% & 90 – 100%

CO2 sensors should be periodically calibrated. Sensors offer excellent linearity when calibrated to a certified span gas.

## Order Information:

Record Part Number with selected options in Blank Indicated Area of Form

### Model Number:

CO2-740 Carbon Dioxide Analyzer

### Selected Range & Sensor:

- 1 CO2-1x Sensor 0 – 1000ppm, 2000ppm, 3000ppm, 4000ppm & 5000ppm
- 2 CO2-2x Sensor 0 – 1%, 2%, 3%, 4% & 5%
- 3 CO2-3x Sensor 0 – 5%,10% 25%, 50% & 100%
- 4 CO2-3x Sensor 0 – 100%, 50 – 100%, 70 – 100%, 80 – 100% & 90 – 100%

### Gas Connections:

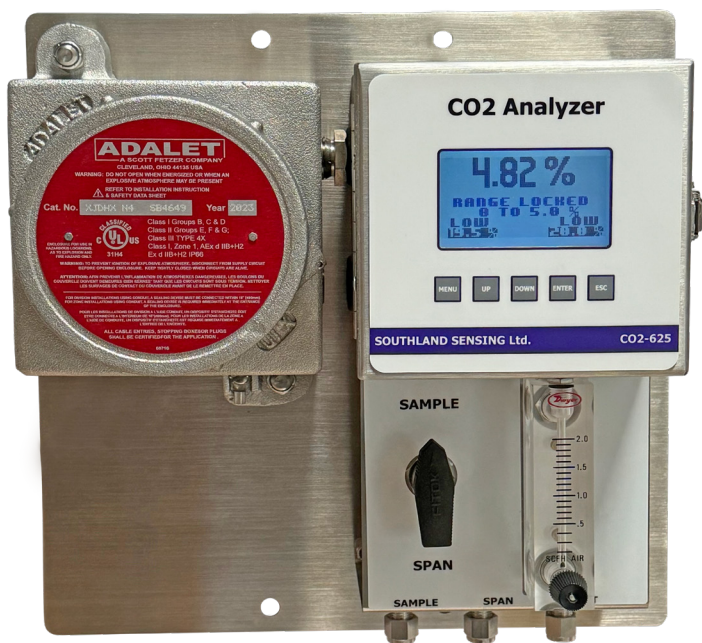
- 4 1/4" Compression Tube Fittings
- 6 6mm Compression Tube Fittings
- 8 1/8" Compression Tube Fittings

CO2-740 - \_\_\_\_\_ - \_\_\_\_\_ Use This Part Number When Ordering

\*\* For assistance when ordering, contact our inside sales specialist \*\*



## Hazardous Area Online Process Carbon Dioxide Analyzer w/ Sample System



## Optional Configurations:

- Sample System Add-On Components
- Bi-Directional RS485 Modbus RTU
- Extreme Weather Packaging
- Extended Temperature Ranges

## Applications:

- Natural Gas Extraction & Pipelines
- Natural Gas Processing
- Landfill Gas Monitoring
- Biogas before and after the CO<sub>2</sub> Scrubber
- And Many Other Industrial Applications

## "Inquiry for Application Expertise"

## Precision IR CO2 Sensor

## Designed for Natural gas & Biogas Applications

F.S. Ranges of 0 -5000 ppm up to 0 - 100 %

## Cost Effective and Low Maintenance

## Large Backlit Display

## Intuitive User Friendly Interface

## Optional MODBUS RS485 RTU

## 2 Fully Configurable Alarm Relay Contacts

### Specifications:

|                       |                                  |
|-----------------------|----------------------------------|
| Accuracy:             | < +/-1% Full Scale Range*        |
| Alarms:               | 2 Configurable Relay Contacts    |
| Analyzer Range:       | Single Range                     |
| Area Classification:  | Class 1, Div 1 Groups B, C, D    |
| Dimensions:           | 12" x 12" x 5.25"                |
| Flow:                 | 0.50 - 5.0 SCFH                  |
| Gas Connections:      | 1/4" Compression Tube            |
| Output:               | Isolated 4 - 20mA or 1 - 5 VDC   |
| Power:                | 12 - 24 VDC<br>100 - 240 VAC     |
| Pressure              | 0.1 - 50 PSIG Inlet, vent to atm |
| Response Time:        | T90 in 45 Seconds                |
| Sample System:        | Optional                         |
| Sensor:               | Precision IR Cell                |
| Temperature:          | 0 to 50 deg C                    |
| Warranty Sensor:      | 12 Months                        |
| Warranty Electronics: | 12 Months                        |
| Weight:               | 21 lbs                           |
|                       | *Accuracy at constant conditions |

### Available Ranges:

|                       |              |
|-----------------------|--------------|
| Single Pre-Set Range: | 0 - 5000 PPM |
|                       | 0 - 5%       |
|                       | 0 - 25%      |
|                       | 0 - 100%     |

## CO2 Analyzer:

The model CO2-625 Carbon Dioxide analyzer combines a rugged design with SSO2's precision CO2 sensors. The result is a highly reliable and cost effective compact design with an easy-to-use user interface designed specifically for the Natural Gas and biogas industries.

The carbon dioxide analyzer is pending certification for use in Zone 1 IIB + H2 applications (ATEX & IECEx) and Class 1 Division 1 Groups B, C, D (North America).

The CO2 analyzer is isolated both on the power input and analog output. This eliminates most electronic gremlins seen with existing competitive equipment in the field.

Gas connections are made with 1/4" Compression tube fittings. Sample Systems includes Sample / Span valve and flow meter.

The CO2-625 analyzer comes with an optional MODBUS RS485 RTU Bi-Directional Communication protocol.

## CO2 Sensor Technology:

The Carbon Dioxide sensor used in the CO2-625 is based on the IR easurement cell principal. All CO2 sensors are manufactured under a strict quality program.

The sensors are self-contained and minimal maintenance is required - no need to clean electrodes or add electrolyte.

The Southland Sensing precision CO2 sensors offer excellent performance, accuracy and stability while maximizing the expected life.

## Power Requirements:

|               |                                           |
|---------------|-------------------------------------------|
| Input Power:  | 12 - 24 V DC                              |
| Current Draw: | 50 mA                                     |
|               | ** Optional power input choices available |

## CO2 Sensors:

CO2-1x PPM CO2 Sensor: Single Range: 0 - 5000 PPM  
CO2-2x Percent CO2 Sensor: Single Range: 0 - 5%  
CO2-3x Percent CO2 Sensor: Single Range: 0 - 25%  
CO2-4x Percent CO2 Sensor: Single Range: 0 - 100%

CO2 sensors should be periodically calibrated. Sensors offer excellent linearity when calibrated to a certified span gas.

## Order Information:

Record Part Number with selected options in Blank Indicated Area of Form

### Model Number:

CO2-625 Carbon Dioxide Analyzer

### Selected Range & Sensor:

- 1 0 - 5000 PPM Single Range; CO2-1x
- 2 0 - 5% Percent Single Range; CO2-2x
- 3 0 - 25% Percent Single Range; CO2-3x
- 4 0 - 100% Percent Single Range; CO2-4x

### Electronics Package:

- 4 12 - 24V DC Input Power
- 4M 12 - 24V DC Input Power + MODBUS RS485 RTU
- 7 100 - 240 VAC Input Power
- 7M 100 - 240 VAC Power + MODBUS RS485 RTU

### Gas Connections:

- 4 1/4" Compression Tube Fittings with Sample / Span Valve & Flowmeter
- 6 6 mm Compression Tube Fittings with Sample / Span Valve & Flowmeter
- D Delete Sample / Span Valve & Flow Meter, 1/8" Compression Tube Fittings

CO2-625 - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Use This Part Number When Ordering