# 700 Series
## NDIR/O2 Analyzer

### Features
- Measures IR From Low ppm up to 100% Full Scale And Oxygen from 0-1% up to 0-100%
- Multi-Component—Up to Three IR Channels or Two IR Channels Plus Oxygen
- Auto Calibration and Ranging
- Fast Response Time
- Temperature and Pressure Compensation
- Comprehensive Diagnostics
- Output Options: Voltage, Current, RS-232, TCP/IP, MODBUS
- CE Mark and ETL Listed—Conforms to UL STD 61010-1, Certified to CAN/CSA C22.2 STD No. 610610.1
- Meets 1065 Requirements

### Applications
- Stack Gases (CEM)
- Combustion Efficiency
- Turbine/Generator Feedback Control
- Process Chemical Gas Analysis
- Personnel Safety
- Fuel Cell Analysis
- Vehicle Emissions

### Options
- Internal Sample Pump
- Sample Flow Control
- Multiple Inputs
- 19 Inch Rack Mount Slides
## Specifications

### IR Analysis Method
- Non-Dispersive Infrared (NDIR)

### NDIR Components
- CO / CO₂ / CH₄ / SO₂ / NO*  
  *NO is available with an external NOx converter

### Detector Type
- Microflow

### NDIR Ranges
- From 0-50 ppm up to 0-100%

### Response Time (IR)
- 90% of Full Scale in < 1 Second***  
  ***Depending on Cell Length, Flow Rate, and Time Constant

### IR Sample Cell
- Stainless Steel w/ Replaceable gold cell liner

### Resolution
- Typically 0.1% of Full Scale

### Repeatability
- Better than 1.0% of Full Scale

### Linearity
- Better than 1.0% of Full Scale of Factory Calibrated Ranges

### Noise
- Less than 1% of Full scale of Factory Calibrated Ranges

### Zero & Span Drift
- Less than 1% of Full Scale per 24 Hours

### Zero & Span Adjustment
- Via front panel, TCP/IP or RS-232

### Sample Flow Rate
- 0.5 to 2.0 LPM

### Oxygen Analysis Method
- Paramagnetic or Fuel Cell

### O₂ Ranges
- 0-1% (Paramagnetic Only) up to 0-100% O₂ Full Scale, Four Definable Ranges

### O₂ Response Time
- T90—2 Seconds Paramagnetic, 16 Seconds Fuel Cell

### Outputs available
- TCP/IP, RS232, MODBUS  
  Four Scalable Analog 0-10V / 4-20mA (Allows Offset & Expandable Range DC Analog Outputs)

### Discrete Control
- Remote/Local Control, Range Change, Range Sense Mode (All TTL Logic)

### Discrete Alarms
- (Local & Remote Adjustable) General Fault/TTL Logic (Ground True) Calibration Failure/TTL Logic (Ground True) Concentration (2 Each) TTL Logic (Ground True)

### Digital Diagnostics
- Pressure – Pressure Control Voltages Temperatures – Flow Parameters

### Keypad Displays
- Factory Settings, TCP/IP address, Passwords(4), Scalable Analog Output Voltages, Full Scale Range Select, Auto Cal Times

### Special Features
- Auto Ranging, Data Streaming, Auto Calibration (adjustable through internal clock)

### Display
- 3” x 5” Back lit LCD

### Sample Temperature
- Up to 50°C, Non-condensing

### Ambient Temperature
- 5 to 40°C

### Ambient Humidity
- Less than 90% RH  
  (Non-condensing)

### Fittings
- 1/4 Inch Tube

### Power Requirements
- 115/230 (+/- 10%) VAC; 50/60Hz, 300 watts maximum

### Dimensions
- 51/4”Hx19”Wx23”D

### Weight
- 30-45 lbs. (Depending on configuration)

*Specifications subject to change without notice.*