



# Ei800 Series Process Gas Chromatograph

## Continuous Gaseous Fuels Analyzer

The Ei800 Series Process GC provides fast and accurate online monitoring of gaseous fuels. The TCD sensor technological breakthrough increases sensitivity by orders of magnitude, dramatically increases speed and response time, and for the first time allows you to perform all of your measurements with one analyzer. Despite its small size, it is incredibly powerful and can be programmed for manual gas analysis as well as continuous process monitoring.

### Key Features

- Super fast analysis: 30 seconds for complete gas composition analysis
- Extreme Sensitivity and Accuracy (500 ppb DL)
- Multi-Stream Capable
  - Analyses complete within the 15-minute EPA RFS mandate
- Minimal carrier gas consumption (5 mL/min)
- Low Power Requirements
  - 10W power consumption
  - No AC required (24 VDC)
- Extremely Compact Design
  - 11.4 x 10.2 x 4.8"
  - Weighs less than 30 lbs
- Easy to maintain
  - Robust design
  - No tubes or capillaries
  - Replaceable cartridges
- 24/7 autonomous operation without PC
- Integrated data processing and communication
- Configurable gas ports

### Options

- Explosion-proof Enclosure
- Multi-Sampling Point Switching System

### Applications and Measurements

- Natural Gas
  - Custody Transfer
  - Sulfur Compounds (14 per ASTM D6228)
  - Trace Oxygen
  - Trace Moisture
  - BTEX
- RNG Process Monitoring
  - Inert Coating for H<sub>2</sub>S Applications
  - Vacuum Eductor System for Low-Pressure Applications
- RNG Interconnection Compliance
- EPA Renewable Fuel Standard (RFS) compliant



**All the benefits of a traditional GC without the limitations**





## Specifications

Technical Specifications	
Cycle Time	15 to 60 s (typical)
Repeatability of Concentration	< 0.05 % RSD (typical, concentration dependent)
Calorific Value Calculation for Natural Gas	ISO 6976:2016, GPA 2172, ASTM D3588: ± 0.025% repeatability
Operating Temperature	-20 to 55 °C / -4 to 131 °F
Storage Temperature	-20 to 60 °C / -4 to 140 °F
Moisture	5 to 95 %
Dust/Water Protection	IP65 (only valid with receptacle cap /mating connections)
Power Supply	20 to 28 VDC
Power Consumption	20 W nominal, 75 W max
Dimensions	289 ×258 ×122 mm /11.4 ×10.2 ×4.8"
Weight	< 15 kg /33 lb. (without mounting brackets)
Gas Port	1 /16" VICI Valco
Carrier Gas	He, Ar, N <sub>2</sub> , or H <sub>2</sub>
Carrier Gas Input Pressure	65 ± 5% psi
Carrier Gas Consumption	15 ml /minute typical
Sampling	Pressurized or atmospheric (integrated pump)
Sample Pressure	1 to 30 psi (but < column head pressure)
Sample Streams	4 (option for more)
Detectors	Fore-flush and back-flush micro TCD
Detection Limit	500 ppb to 100% (application dependent)
Communication Ports	2 × MODBUS over RS485 1 × MODBUS over RS232 1 × MODBUS over TCP /LAN Ethernet 2x Digital I /O
Memory Storage	Up to 256 GB
Certifications	ATEX/IECEX II 2G Ex db IIB+H2 T4 Gb; NEC&CEC Class I, Div. 1, Groups B,C and D, T4 (pending)

