



3000 Micro GC

1, 2, 3 and 4-Channel Systems

The INFICON 3000 Micro GC Gas Analyzer is a powerful GC solution that provides fast, accurate, reliable analysis of your gas sample on-line, right at the sampling point. It is ideal for the rapid analysis of gas streams in alternative energy, coal mine safety, and the hydrocarbon processing industry, which includes refineries, natural gas production and distribution, chemical operations, and oil and gas exploration.

SAMPLING

- Compatible with mixtures that are in a gaseous phase at standard temperature and pressure (STP); typically for compounds with boiling points < 250 °C
- Compatible with highly pressurized (liquefied) gases, such as liquefied petroleum gas (LPG), with heated vaporizer accessory
- Maximum sample pressure < 207 kPa (30 psig); recommended sample pressure ambient -69 kPa (ambient -10 psig)

SAMPLE INJECTORS

- Micro-electromechanical devices fabricated from silicon and other inert materials
- Injector types fixed volume, heated; variable volume/timed, heated; variable volume/large loop, heated; or backflush to vent, heated
- Injection volume 1 to 10 µL for variable volume/timed and 1 to 30 µL for variable volume/large loop, which depends on sample composition and gas compressibility; 1 µL for fixed volume injector and backflush injector
- Internal sample vacuum pump
- 1/16-in. 316 stainless steel bulkhead deactivated sample introduction port with 5-µm filter

DETECTOR

- Micro-electromechanical device fabricated from silicon and other inert materials
- 240 nL internal volume
- Thermal conductivity detector (TCD) using Wheatstone Bridge design

MINIMUM DETECTION LEVEL

Typically 10 ppm and can be as low as 0.8 ppm when using performance enhanced configuration for certain applications. Does not include reactive compounds (for example, sulfur containing).

LINEAR DYNAMIC RANGE

$10^6 \pm 10\%$



SPECIFICATIONS (cont'd)

Physical specifications

Power supply input	115 to 230 VAC, 50 to 60 Hz, 1.2 to 0.6 Amps
Power supply output	15 VDC at 6.6 Amps, 100 Watts
· Height 15.0 cm	
· Width 12.5 cm	
· Depth 9.0 cm	
· Weight 1.4 kg	

Heated Regulator (Inlet)

Sample stream pressure reduction, temperature control, and removal of entrained liquid and particles

Handles sample gas streams with C5 + components 2	0.5 mole %
Quick-connect fittings	
7- μ m sintered stainless steel particle filter	

Operating conditions

Flow operating temperature	60 to 120°C
Sample input pressure	14 to 5516 kPa (2 to 800 psig)
Delivery pressure to Micro GC	0 to 52 \pm 17 kPa (0 to 7.5 \pm 2.5 psig)

Environmental conditions

Operating temperature range	0 to 50°C
Relative humidity	5 to 95% (noncondensing)
Altitude	To 15,000 ft (4,572 m)
Usage	Indoor or enclosed

Physical specifications

Power supply input	115 to 230 VAC, 50 to 60 Hz, 1.2 to 0.6 Amps
Power supply output	15 VDC at 6.6 Amps, 100 Watts
· Height 15.0 cm	
· Width 12.5 cm	
· Depth 9.0 cm	
· Weight 1.65 kg	

Pressure Reducer

High pressure manual flow controller (30 to 240 cc/min air)

Handles sample gas streams with	C ₅ + < 0.5 mole %
Sample input pressure	< 6895 kPa (1000 psig)
Sample inlet connection	1/8-in. Swagelok fitting
Overflow vent	1/8-in. Swagelok fitting
Particulate filter	10 μ m

Gas-Liquid Separator and Pressure Reducer

Low pressure manual flow controller	
5- μ m particle filter and moisture trap	
Sample input pressure	< 3447 kPa (500 psig)
Sample inlet connection	1/8-in. Swagelok fitting

Safety and Regulatory

Conforms to the following safety standards	Canadian Standards Association (CSA) C22.2 No. 61010-1 CSA/Nationally Recognized Test Laboratory (NRTL) UL61010-1 International Electrotechnical Commission (IEC) 61010-1 EuroNorm (EN) 61010-1
Conforms to the following regulations on Electromagnetic Compatibility (EMC) and Radio Frequency Interference (RFI)	CISPR 11/EN 55011 Group 1 Class A IEC/EN 61326 Declaration of Conformity available

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Control Software and Software Reporting

Cerity NDS for 3000 Micro GC
EZChrom Elite for 3000 Micro GC

Application Reports

BTU Calorific Report	BTU/calorific calculation and reporting for natural gas analysis in accordance with GPA 2172-96, ASTM D 3588-98, and ISO 6976-1966 standards (Reference documents GPA 2261-99, GPA 2145-00 ISO 10723 and ISO 6974)
Refinery Gas Report	Four-channel integrated report with calorific calculation

Dimensions/Weight

1,2-Channel (G2801A,G2803A)

Maximum weight	18.0 lb (8.2 kg)
Height	5.9 in. (15 cm)
Width	9.8 in. (25 cm)
Depth	16.1 in. (41 cm)

3,4-Channel (G2802A,G2804A)

Maximum weight	27.0 lb (12.2 kg)
Height	6.1 in. (15.5 cm)
Width	18.5 in. (47.2 cm)
Depth	16.5 in. (42 cm)

Portable (G2805A)

Maximum weight	36.5 lb (16.6 kg)
Height	6.1 in. (15.5 cm)
Width	14.3 in. (36.4 cm)
Depth	16.3 in. (41.3cm)



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Due to our continuing program of product improvements, specifications are subject to change without notice.

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