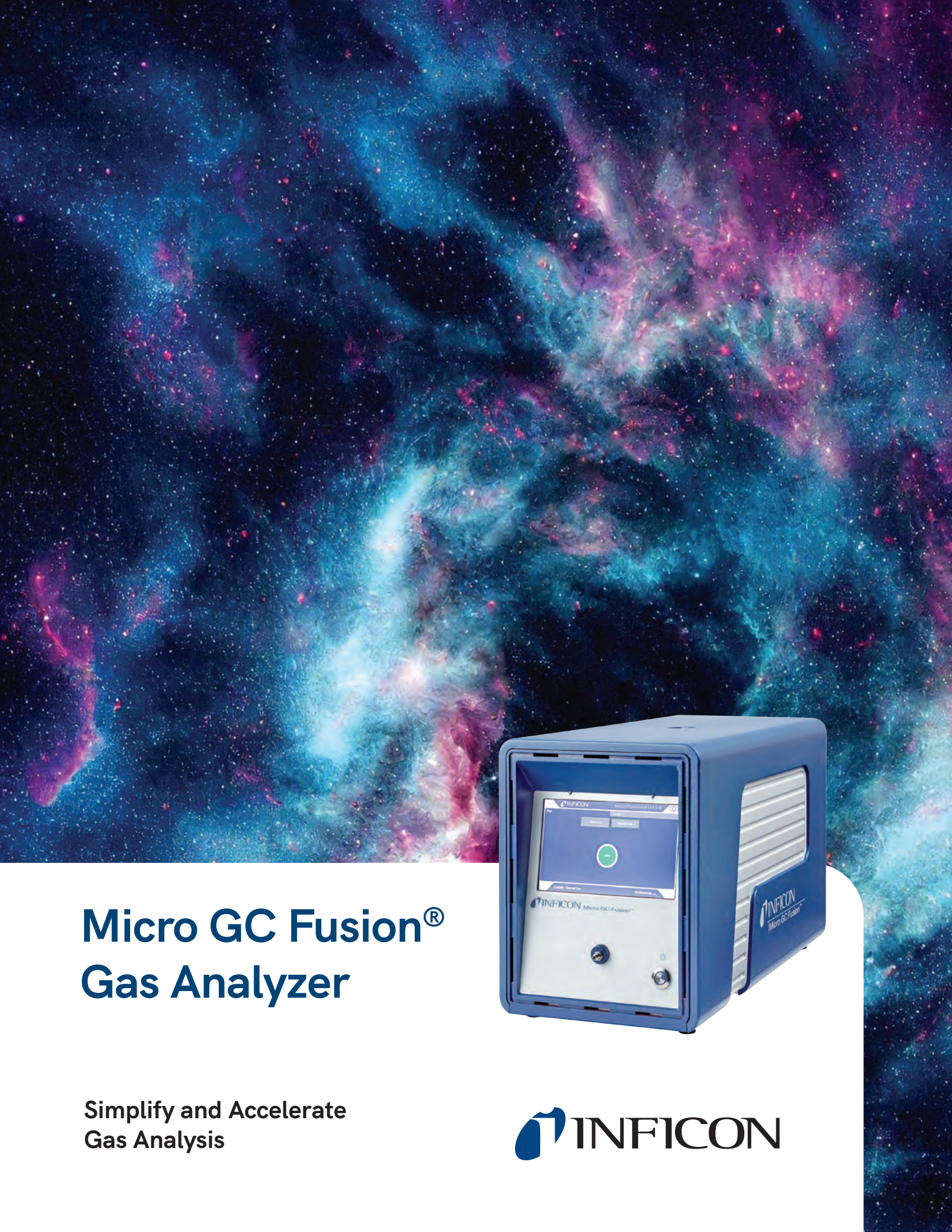


Micro GC Fusion®
Gas Analyzer

Simplify and Accelerate
Gas Analysis

INFICON

Maximum Throughput and Easy Operation for Fast Decisions

Rack-mountable chassis is optimized for online applications.

Micro GC Fusion offers significant throughput gain through rapid temperature ramping and modular architecture. The transportable, lightweight chassis and web-based user interface enable simplified operation for both on-site and in-lab gas analysis.

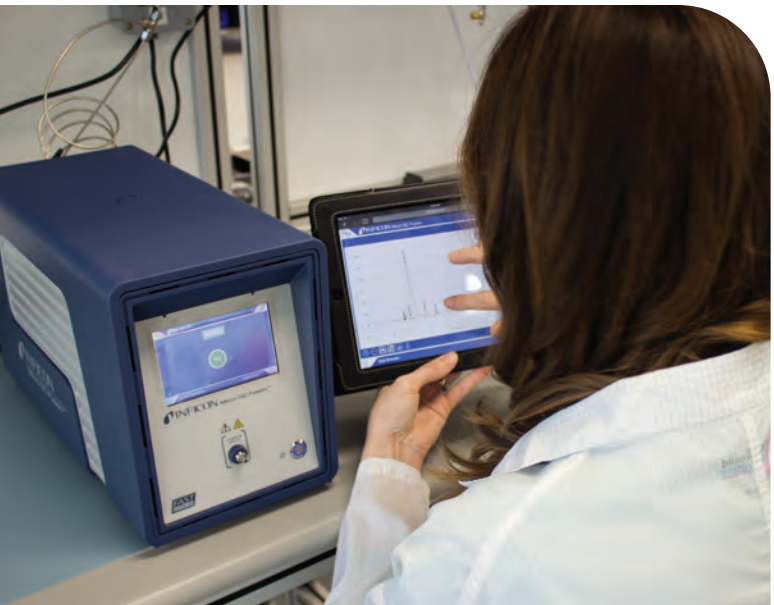
Optimal Throughput

Micro GC Fusion is equipped with a resistively heated GC column, allowing up to 300°C/min. temperature ramping, which reduces analysis time and enhances sensitivity for extended hydrocarbon analysis. Micro GC Fusion utilizes a modular GC architecture, allowing up to four GC modules to be housed in a single product, giving the ability to provide parallel analysis of an injected sample. Each independently programmed GC module comprises an injector, temperature-programmable column, and detector. Through integration with a Valco stream selector, Micro GC Fusion can analyze individual gas streams with sample-specific methods, freeing lab technicians from manually switching sample lines or changing methods to optimize throughput.

Easy Operation

The FAST (Fusion Auto-Sensing Technology)-enabled Micro GC Fusion significantly simplifies method development for analytical chemists to achieve accurate analysis over a broad sample concentration range. FAST is a major technological advancement that allows both high-percentage and low-ppm components to be analyzed in the same run, using a single GC module. An analysis can be run directly from the front panel display or from an external computing device. The web-based chromatographic software is operable on a smartphone, tablet, or computer with wireless or Ethernet connectivity. It is operating system independent and requires no licensing and installation, relieving lab managers from maintaining computer and chromatography software compatibility.

An optional heated integrated sample conditioner may be factory configured to allow field technicians to accurately analyze sample gas streams at input pressures up to 1000 psi.



Simplify network connectivity with embedded wireless technology to enable instrument control from computer, tablet, and smartphone.

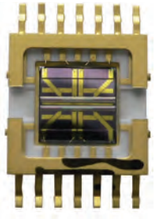
ADVANTAGES AT A GLANCE

- ✓ Minimize analysis time
- ✓ Maximize availability
- ✓ License-free access
- ✓ Easy connectivity
- ✓ Minimize sampling handling
- ✓ Simplify on-site analysis

Maximize instrument availability with integration of optional sample conditioner, front panel display, embedded software, and data storage.

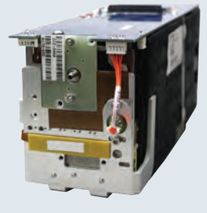
Simplify on-site analysis with front panel display that provides instrument control, analysis results, and status updates.

FAST ENABLED™



Simplify the analysis of complex samples containing high-percentage and low-ppm components using Micro GC Fusion Auto-Sensing Technology (FAST).

MEMS µTCD capable of measuring down to 1 ppm.

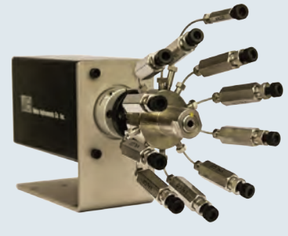


Minimize run time with parallel analysis by multiple GC modules and fast temperature ramping.

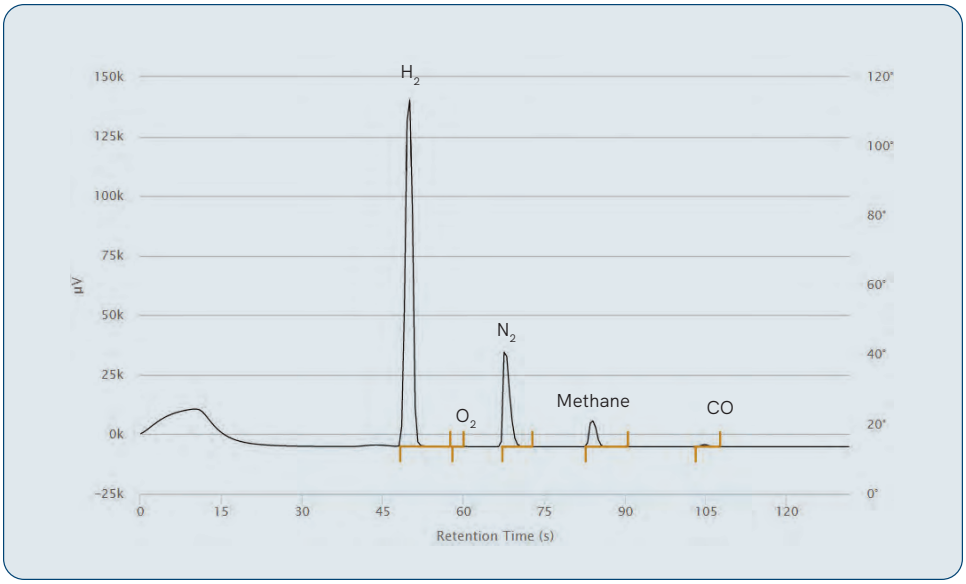
APPLICATIONS

- Natural gas and extended natural gas
- Syngas, fuel cell, landfill gas, and biogas
- Catalyst research for alternative energy
- Impurities in petrochemical products and specialty gases
- H_2S and odorants in natural gas
- SO_2 and H_2S gas monitoring
- Permanent gases and olefins in refinery gas
- Solvent/VOC gas monitoring
- Mud logging in oil and gas exploration
- Mine gas

Simplify operation with a license-free web-based user interface that is accessible from any web browser.



Automate multiple stream sampling with preassembled Valco Stream Selector.

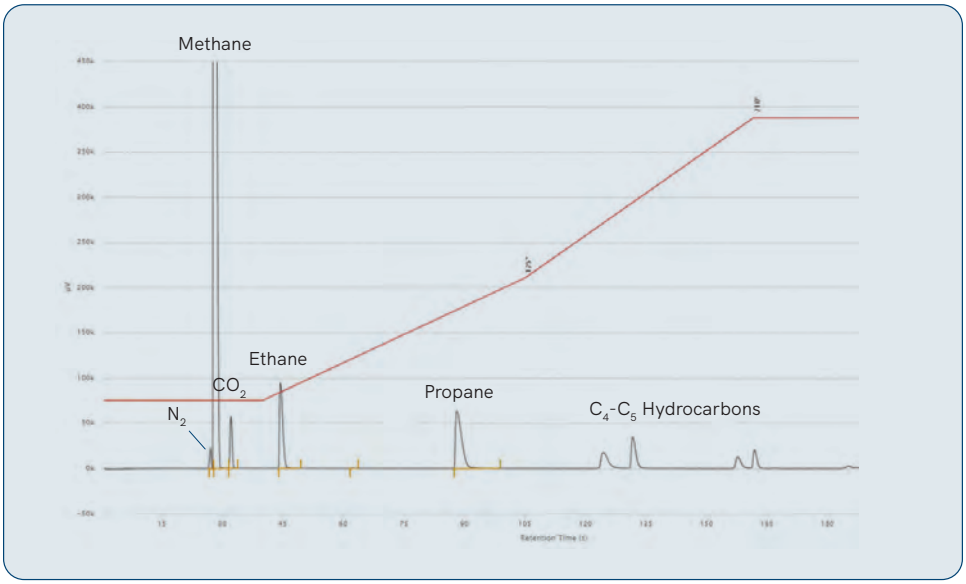


Permanent gases

Column: 10 m Rt®-Msieve 5A

Column temperature: 90°C

Carrier gas: Argon

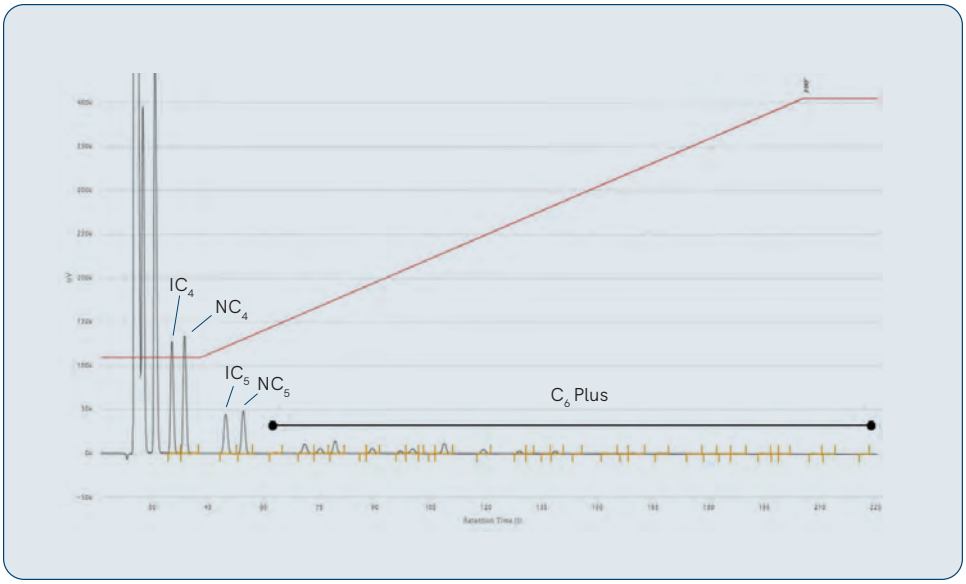


Permanent gases
and hydrocarbons
in natural gas

Column: 12 m Rt®-Q-Bond

Column temperature:
60°C (40 s) > 1.5°C/s >
125°C (0 s) > 1°C/s >
210°C (30 s)

Carrier gas: Helium



Hydrocarbons
in natural gas

Column: 10 m Rxi®-1ms

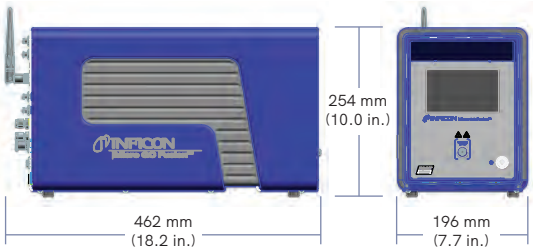
Column temperature:
70°C (40 s) > 0.8°C/s >
200°C (20 s)

Carrier gas: Helium

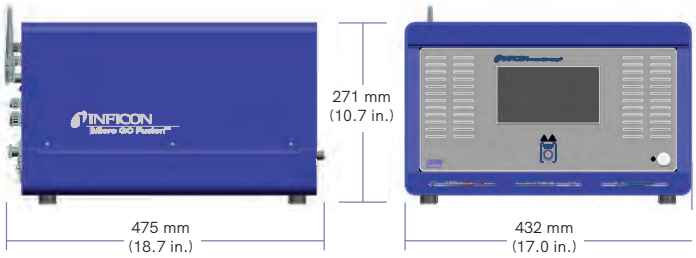
MICRO GC FUSION GAS ANALYZER

SPECIFICATIONS	
DIMENSIONS/WEIGHT	
Maximum weight: 2-module chassis	6.2 kg (13.6 lb.)
Maximum weight: 4-module chassis	15.4 kg (33.8 lb.)
Dimensions (L x W x H): 2-module chassis	46.2 x 19.6 x 25.4 cm (18.2 x 7.7 x 10 in.)
Dimension (L x W x H): 4-module chassis	47.5 x 43.2 x 27.1 cm (18.7 x 17 x 10.7 in.)
INJECTORS	
Types	Variable volume, variable large volume, backflush, fixed volume
Carrier gas	External cylinder Helium, hydrogen, nitrogen, argon
GC columns	Wall Coated Open Tubular (WCOT) Porous Layer Open Tubular (PLOT)
PROGRAMMABLE COLUMN TEMPERATURE	
Maximum	250°C or column phase maximum, whichever is lower
Resolution	0.1°C
Heating rate	5°C per second maximum, column dependent
THERMAL CONDUCTIVITY DETECTOR	
Linear dynamic range	106 ± 10%
Detection limit	1 ppm, n-Hexane (WCOT columns)
Internal volume	240 nL (MEMS)
REPEATABILITY	
Retention time	≤0.1% RSD (WCOT columns)
Peak area	≤1% RSD (compounds at ≥0.1% concentration, WCOT columns)
ENVIRONMENTAL CONDITIONS	
Operating temperature	0–50°C ambient
Relative humidity	5–95% (non-condensing)
Vibration: 2-module chassis	MIL-STD-810F-514.5C, Highway Truck Vibration
Control software	Web-based compatible with common web browsers Driver for EZ IQ and OpenLAB CDS EZChrom
COMMUNICATION	
Wired Ethernet	RJ-45 connection
Wireless Ethernet	IEEE 802.11a/g/n
POWER SUPPLY	
Power supply input	100–240 V (AC), 50–60 Hz, 5 A
Power supply output: 2-module chassis	24 V (DC), 10.83 A, 260 W

DIMENSIONS



2-MODULE CHASSIS



4-MODULE CHASSIS

INFICON Inspired by visions. Proven by success.

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