

GAS METERING SYSTEM

A COMPONENT OF FIDERIS'S FUEL CELL TEST SYSTEM™

- Up to Six Metered Gas Channels from a Single or Multiple Gas Source
- Conduct Independent Tests on Separate Cells Concurrently
- Automatic Purge of Fuel System on User or System Initiated Shut Down
- System Wide Control of All Fideris Fuel Cell Test System Equipment Using FCPower™ Software



- Independent Fail Safe Purge of Each Fuel Line
- Stoichiometric Control of Reactant Gases
- Available with Gas Handling Upgrade For Downstream Gas Control

MODEL **FCTS GMET™**
FUEL CELL TEST SYSTEM GAS METERING UNIT™

fideris
innovative solutions

GAS METERING SYSTEM

A MEMBER OF FIDERIS'S FUEL CELL TEST SYSTEM™ FAMILY

FEATURES:

- *Test multiple fuel cells with one unit*
- *Easily exchanged mass flow controllers*
- *External manifold allows for changeable configurations*
- *Independent control allows user to run different tests on separate fuel cells concurrently*
- *Up to 6 metered channels from a single or multiple gas source*
- *Outputs can be manifolded to provide a mixed gas stream*
- *Individual pressure gauges for regulated gas pressure monitoring and adjustment*
- *Independent pressure regulators on each input gas line*
- *Check valves on inlet gas lines to prevent gas backflow into gas source lines*
- *All gas lines are made of seamless 316 stainless steel tubing*
- *Independent fail safe purge of each fuel line*
- *Front panel emergency stop button*
- *Ambient combustible and toxic gas detectors available*
- *System wide control of all Fideris FCTS™ equipment using FCPower™ Software*

Note: For higher gas flow rates please refer to the Gas Metering-Pneumatic System.

SPECIFICATIONS:

Gas Metering:

Reactant Gas Control:	Up to 6 metered channels from a single or multiple gas source
Range of Gas Flow:	up to 100 lpm per channel
Maximum Inlet Gas Pressure:	250 psi

Back Panel Connections:

Power Inlet:	IEC-320 (mating cord provided)
Gas Inlets:	
On Box:	1/4" Swagelok® for all gases
On External Manifold:	3/8" Swagelok®
Gas Outlets:	1/4" Swagelok®
Data Connection:	RS-485 DB9

Electrical Requirements:

Voltage:	120 VAC (208/220/240 optional)
Frequency:	60 Hz (50 Hz optional)
Current:	6 Amps @ 120V

Installation Requirements:

Clearance for Operation:	Back: 9", RH: 2", LH: 2", Top: 0"
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Physical Characteristics:

Dimensions:	12.75" high; 21.75" wide; 25.65" deep
System Weight:	75 lbs
Operating Environment:	40° to 100° Fahrenheit; 85% RH
Cabinet Rating:	Indoor

GAS METERING SYSTEM WITH GAS HANDLING OPTION

Order the Gas Handling option when you need to control fuel cell exit gases!



Gas Handling Features:

- Downstream gas control of two gases
- Adjustable exit gas pressure regulators provide uniform back pressure to fuel cell from ambient to 50 psi
- Water knockout from fuel cell exit gases
- 3/8" tubing for high gas flows
- Back panel access to static pressure ports allows user configuration of pressure monitoring points
- Optional differential gas pressure display and data acquisition to measure pressure drop across fuel cell

ADDITION SPECIFICATIONS FOR GAS METERING SYSTEM WITH GAS HANDLING OPTION:

Back Panel Connections:

Gas Handling Inlets:	3/8" Swagelok®
Gas Handling Outlets:	3/8" Swagelok®
Static Ports:	1/8" Swagelok®
Water Drains:	1/8" Swagelok®
Cooling Loop:	3/8" Swagelok®

Physical Characteristics:

Dimensions:	24.25" high; 22" wide; 27.5" deep
System Weight:	120 lbs.

Specifications subject to change.

This equipment may be protected by one or more of the following patents: U.S. Patent # 5,512,831, 6,324,042, 6,383,671, 6,792,320. Additional patents pending.

Registered trademark: Swagelok® - Swagelok Co.

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For sales, literature, or technical information regarding Fideris's Fuel Cell Test Systems, please contact:



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