

# Analyzer Flow Control Module

- Flexible design to accommodate from 1 to 4 analyzers
- Compact mounting configuration – 19-inch backplate suitable for wall- or rack-mounting
- 316 SS wetted parts for maximum corrosion protection
- Front access guard filters
- Easy introduction of calibration gases
- Flowmeter with precision needle valve

## DESCRIPTION

For all gas measurement technologies, the precision of the reading is dependent upon the proper control of the sample and calibration gas flow rate through the analyzer. The pre-fabricated Model 6100 Flow Control Module is a convenient means to that control. The flexible design makes the Flow Control Module suitable for use with 1 to 4 analyzers. It can be used as a stand-alone unit or it can be integrated with other sample conditioning modules.

The Model 6100 Flow Control Module includes a bypass flowmeter with needle valve to minimize the sample transport time. Each analyzer has a dedicated flowmeter with precision needle valve which allow for customized flow rate through the individual analyzers. The five-way valve facilitates the introduction of zero and span gases. A shutoff position is also provided to isolate any analyzer for maintenance purposes. This position can also be used to introduce span gas for additional ranges on the instrument. In the event of any particulate carry over, a 7 micron guard filter is provided for analyzer protection.

## APPLICATIONS

- Ultra-high purity gases
- Pre-filtered corrosive gases
- Inert gas analysis in a blanketing environment
- Head space analysis in a storage vessel
- Semiconductor manufacturing

## SPECIFICATIONS

### SAMPLE CONDITIONS

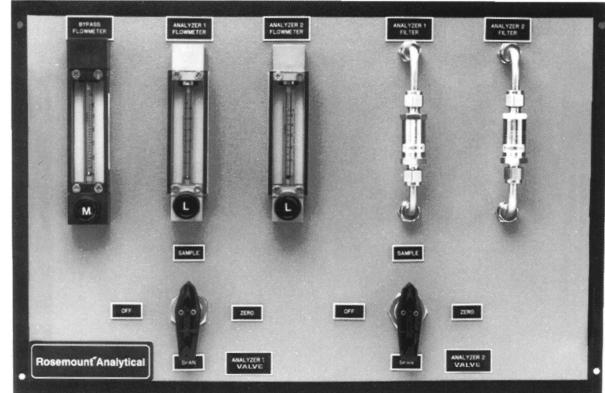
**Inlet pressure:** ≤ 50 psig\* (regulated)

**Inlet temperature:** Up to 200°F\* (98°C)

**Flow rate:** Analyzer flowmeter – 250 to 2000 cc./min.  
Bypass flowmeter – 4000 cc./min.

**Phase:** Single phase gas samples

**Particulate loading:** None. Designed for clean, pre-filtered samples only.



**Ambient temperature:** 0 to 122°F (50°C)

**Fittings:** All fittings will be 1/4" tube fitting (Gyrolok)

**Wetted parts:** 316 Stainless Steel, Viton\*\*=, glass, and Teflon=

**Dimensions:** 19-inch backplate or wall mount plate:

1, 2 or 3 analyzers – 19"(W) x 12.25"(H) x 6"(D)

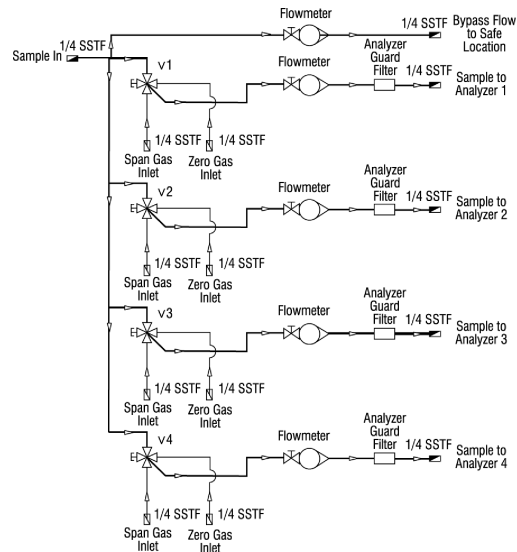
4 analyzers – 19"(W) x 17.5"(H) x 6.5"(D)

**Weight:** Approximately 20 lbs. (9 kg.) for up to 4 analyzers

\* Check analyzer specifications for inlet pressure, temperature, and flow rate.

\*\* Some gases are not compatible with Viton, e.g. acetone. Consult factory for alternatives.

= Viton and Teflon are registered trademarks of E.I. duPont de Nemours and Co., Inc.



**Typical Flow Diagram for a Four-Analyzer Flow Control Module**

## ORDERING INFORMATION

Model	Description
6100	Process Analyzer Flow Control Module (6100)

Level 1	Mounting Configuration	
	1	Backplate (suitable for 19-inch rack)
	2	Backplate (suitable for wall mounting)
	9	Special (consult factory)

Level 2	Flow Control Module for Analyzer No. 1	
	1	Flowmeter: 0 to 2400 cc./min. with needle valve for NDIR, NDUV, FID and CLD analyzers
	2	Flowmeter: 0 to 500 cc./min. with needle valve; for thermal conductivity analyzer
	3	Flowmeter: 0 to 500 cc./min. with precision needle valve; for paramagnetic analyzer
	9	Special (consult factory)

Level 3	Flow Control Module for Analyzer No. 2	
	0	None Required
	1	Flowmeter: 0 to 2400 cc./min. with needle valve; for NDIR, NDUV, FID and CLD analyzers
	2	Flowmeter: 0 to 500 cc./min. with needle valve; for thermal conductivity analyzer
	3	Flowmeter: 0 to 500 cc./min. with precision needle valve; for paramagnetic analyzer
	9	Special (consult factory)

Level 4	Flow Control Module for Analyzer No. 3	
	0	None required
	1	Flowmeter: 0 to 2400 cc./min. with needle valve; for NDIR, NDUV, FID and CLD analyzers
	2	Flowmeter: 0 to 500 cc./min. with needle valve; for thermal conductivity analyzer
	3	Flowmeter: 0 to 500 cc./min. with precision needle valve; for paramagnetic analyzer
	9	Special (consult factory)

Level 5	Flow Control Module for Analyzer No. 4	
	0	None required
	1	Flowmeter: 0 to 2400 cc./min. with needle valve; for NDIR, NDUV, FID and CLD analyzers
	2	Flowmeter: 0 to 500 cc./min. with needle valve; for thermal conductivity analyzer
	3	Flowmeter: 0 to 500 cc./min. with precision needle valve; for paramagnetic analyzer
	9	Special (consult factory)

Level 6	Calibration Valves	
	1	Manual
	9	Special (consult factory)

Level 7	No Selection	
	00	No selection

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