

# 0250 Series

## Power Supply, Readout and Setpoint Controller

The 0250 Series offers secondary electronics for power supply, readout, and set point control, available in two models:

- Model 0251 powers one Brooks® mass flow/pressure device
- Model 0254 powers up to four

It supports functions like flow set point commands, flow rate/pressure display, flow totalization, batch control, and master-slave blending.

This RoHS-compliant, user-friendly device offers easy installation with multiple mounting options.

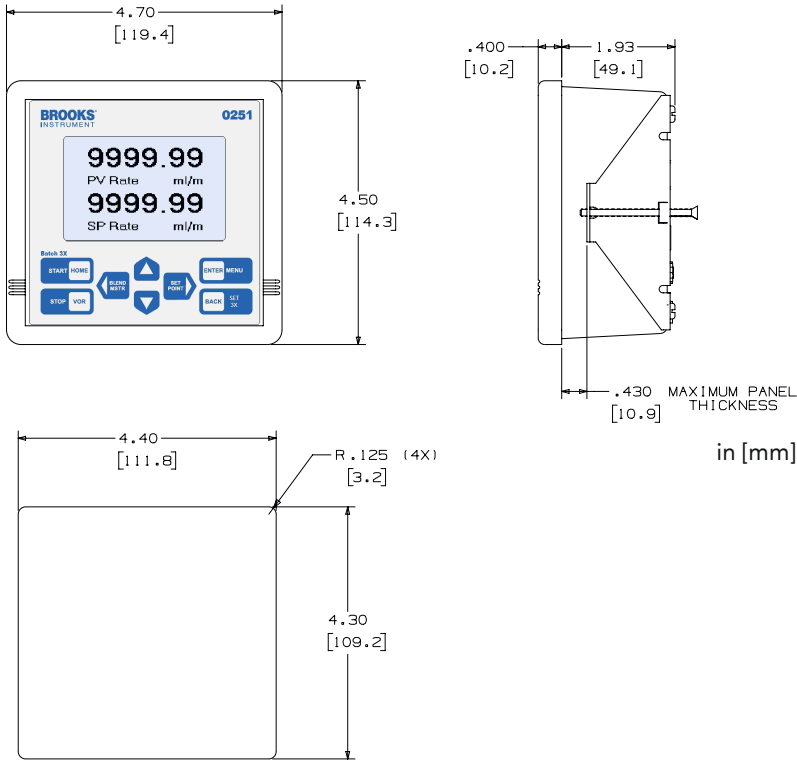


Features	Benefits
Single or Multi-Channel Display	Allows simultaneous display of process variables and setpoints for quick channel reading and adjustment. Users can independently set each channel to show percent full scale or engineering units for flow rate, pressure, density, or temperature.
Backlit Graphic Display	Provides a large, high-contrast screen to view real-time device process variables and setpoints. Enables rapid identification and easy in-process adjustments, with immediate status feedback via display and audio indicators.
Self-Diagnostics	Automatic diagnostic tests ensure easy installation and trouble-free operation. These tests monitor system status, memory conditions, communication adapter status, display functionality, and keypad operation.
Valve Override Control (VOR)	Offers the option to set the valve to open, closed, or normal, enabling rapid purging or chamber flooding when needed.
Sensor Factor Programming	Allows the user to program a gas sensor factor, adapting the device to various mass flow applications across different fluids.
Robust Signal and Power Connectors	Features a 9-pin D connector for power and 15-pin D connectors for device hookup, ensuring secure, vibration- and shock-resistant connections.
RS232 Communication Port	Provides serial communication capabilities for remote readout, setpoint control, and data acquisition. This allows seamless integration into different setups.
Brooks Smart DDE Software	Simplifies the use of the RS232 communication feature, offering free downloadable software for easier control and data management available at <a href="http://BrooksInstrument.com">BrooksInstrument.com</a>

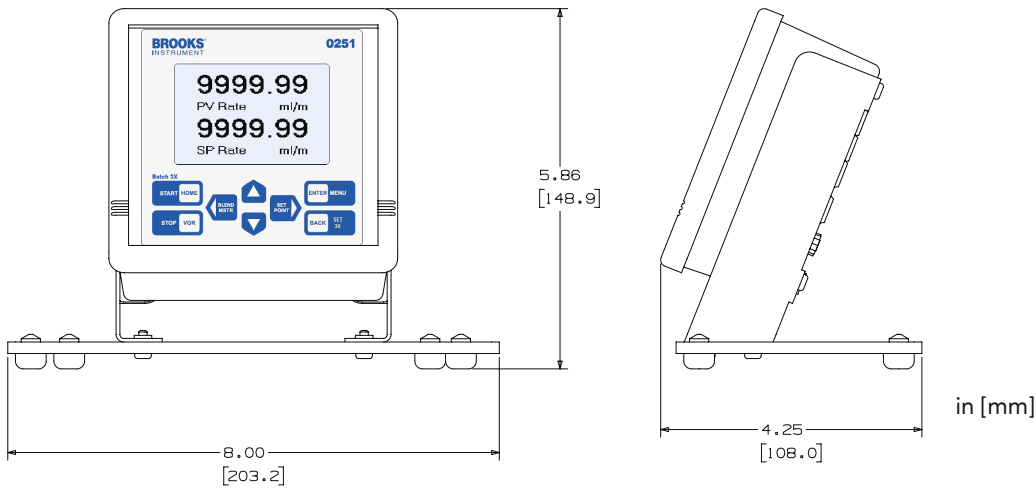
# Product Specifications

	0251	0254
<b>Performance</b>		
Display	8 line x 20 character back-lit LCD display.	8 line x 40 character back-lit LCD display.
Controls	Keypad: 8-Key metal dome tactile push buttons with selectable audio beep for setpoint (rate, batch, blend), VOR, emergency stop, full operation and programming.	
Date Retention	Non-volatile ram/rom, 100 year retention.	
Power Input	Voltage: 12-24 Vdc required, -15 Vdc permitted. Current: 400 mA max. current draw per channel. Instrument power draw: 0.8 Watts. Optional power module: 100-240 Vac, 47-63Hz.	
Power Output	+15 V/2.0 A, -15 V/1.0 A or 12-24 Vdc/2.0 A.	
Signal Input	0(1)-5 Volts, 0(2)-10 Volts, 0(4)-20 mA.	
Signal Output	0(1)-5 Volts, 0(2)-10 Volts, 0(4)-20 mA.	
Communications	Full communications capability for remote readout, setpoint, control, programming and data acquisition via RS232.	
Enclosure	ABS cyclac resin.	
Mounting Options	Panel mount kit, table top kit, rack mount kit, rack mount kit with 19" sub-rack. (Rack mount available for 0254 only)	
Dimensions	See product dimensions on pages 4 - 6.	
Temperature / Humidity	Operating: 32-122°F (0-50°C), 0-95% non-condensing.	
Certifications	CE Mark EMC Directive 2014/30/EU EN:61326-1:2013 Low Voltage Directive 2014/35/EU EN:61010-1-2010 Machinery Directive 2006/42/EC EN/ISO:13849-1:2009, EN:60204-1:2009 RoHS Directive 2011/65/EU FCC Part 15 Class A, part 68 UL-USA & Canada 0254: UL 61010 Electrical Safety for General Purpose Indoor Use.	

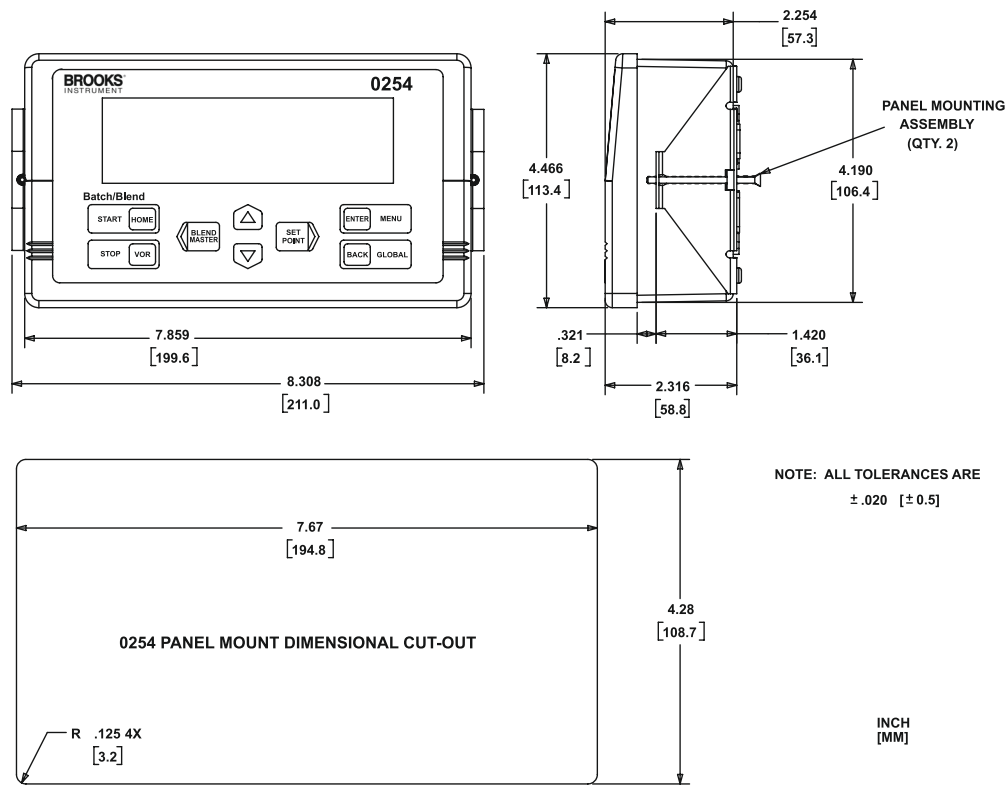
Model 0251 Panel Mount



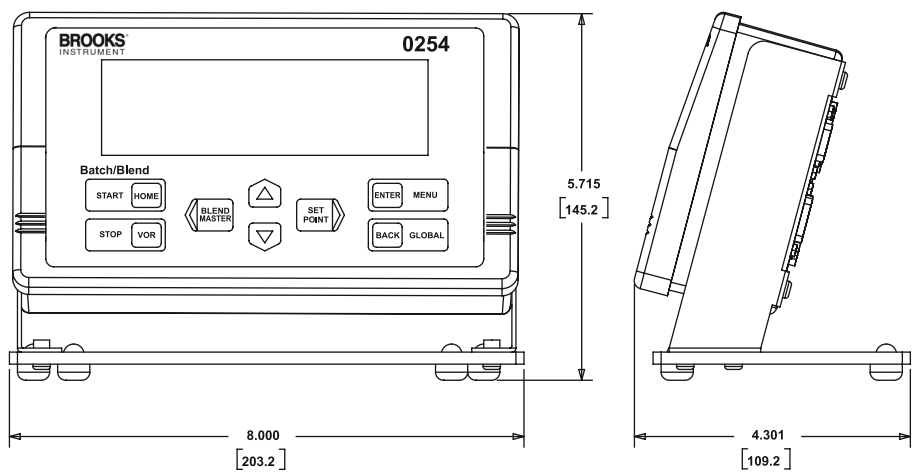
Model 0251 Table Top



Model 0254 Panel Mount



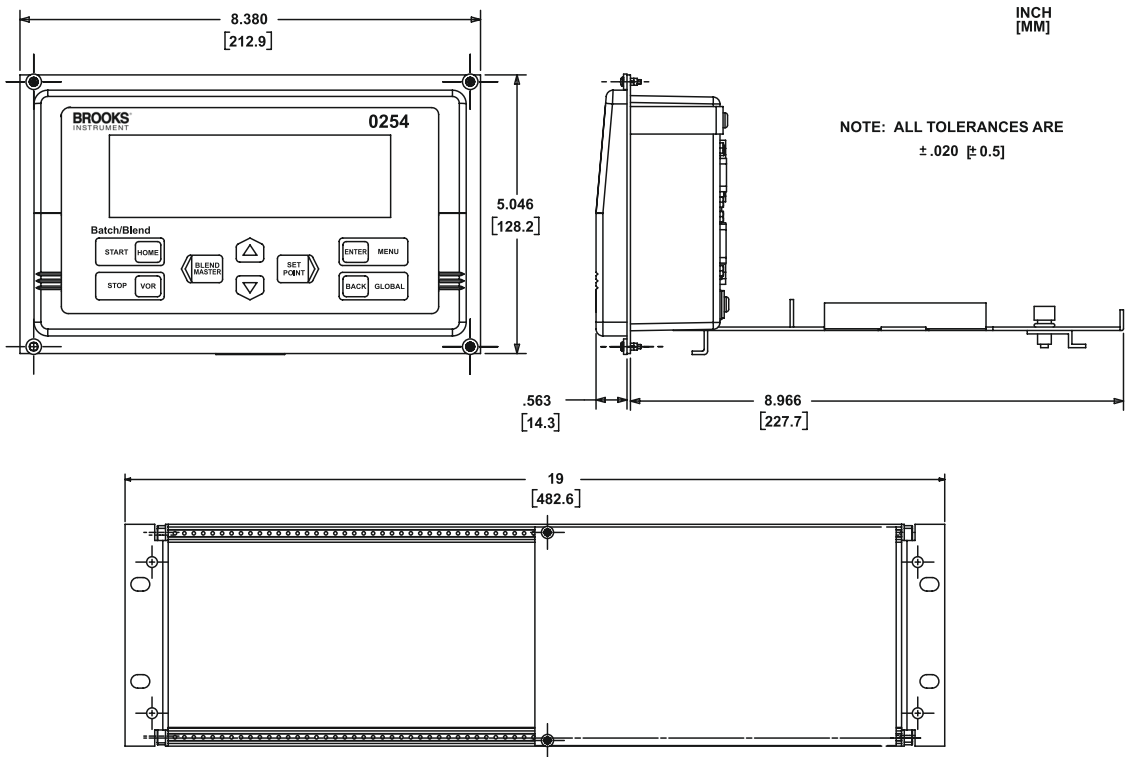
Model 0254 Table Top



NOTE: ALL TOLERANCES ARE  $\pm .020$  [ $\pm 0.5$ ]

INCH [MM]

Model 0254 Rack Mount



Code Description	Code Option	Option Description
I. Base Model Code	0251A	Single channel secondary electronics
	0254A	Four channel secondary electronics
II. Mounting	A	Panel mount kit
	B	Table top kit
	C	Rack mount kit (0254 only, can be used to retrofit 0254 into 0152/54 installations)
	D	Rack mount kit with 19" rack (0254 only)
III. Power Cord for Power Supply Module 100-240 Vdc	1	North American power cord for 120 Vac
	2	European power cord for 220 Vac
	3	None
	4	United Kingdom power cord for 220 Vac
IV. Power Supply Output Voltage	A	± 15 Vdc
	B	+ 24 Vdc
	C	No Power Supply
V. Input / Output Pinout and Signal Adapters	1	Current Pinout (pin compatible with standard Brooks 0(4)-20 mA cables)
	2	Current Pinout / Voltage Pinout Adapter Set (four adapters for use with 0254 and standard Brooks 0(1)-5 Vdc cables; one adapter for 0251)
VI. Options	1	None
	3	RS232 communication cable (1.8m 6ft., 9 pin female 'D' to 9 pin female 'D')
VII. OEM Code	A	Standard Brooks labeling
	N	No logo front labeling

Sample Model Code

I	II	III	IV	V	VI	VII
0254A	B	1	B	2	1	A

Brooks is committed to assuring all of our customers receive the optimal solution for their application, along with outstanding service and support to back it up. We operate first class repair facilities located around the world to provide rapid response and support. Each location utilizes primary standard calibration equipment to ensure accuracy and reliability for repairs and recalibration and is certified by our local Weights and Measures Authorities and traceable to the relevant International Standards.

Visit [www.BrooksInstrument.com](http://www.BrooksInstrument.com) to locate the service location nearest to you.

## START-UP SERVICE AND IN-SITU CALIBRATION

Brooks Instrument can provide start-up service prior to operation when required. For some process applications, where ISO-9001 Quality Certification is important, it is mandatory to verify and/or (re)calibrate the products periodically. In many cases this service can be provided under in-situ conditions, and the results will be traceable to the relevant international quality standards.

## SEMINARS AND TRAINING

Brooks Instrument can provide customer seminars and dedicated training to engineers, end users, and maintenance persons. Please contact your nearest sales representative for more details. Due to Brooks Instrument's commitment to continuous improvement of our products, all specifications are subject to change without notice.



## TRADEMARKS

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