

# 0260 Series

Software & Secondary Electronics

## Control and monitor up to 30 devices with RS-485 Smart protocol digital interface

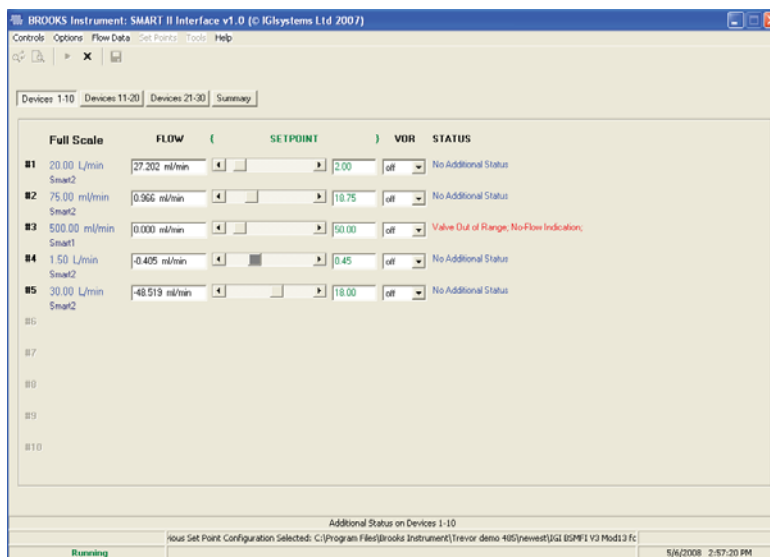
### Overview

The Brooks Smart Interface Model 0260 is a Microsoft® Windows® based software application that provides expanded control and monitoring capabilities in laboratory and research environments for the Brooks thermal mass flow meters and controllers with an RS485 Smart protocol digital interface. Together with the power supply and RS485 to USB hardware module this product provides a great turnkey solution for monitoring and controlling up to thirty (30) mass flow meters and flow controllers

### Product Description

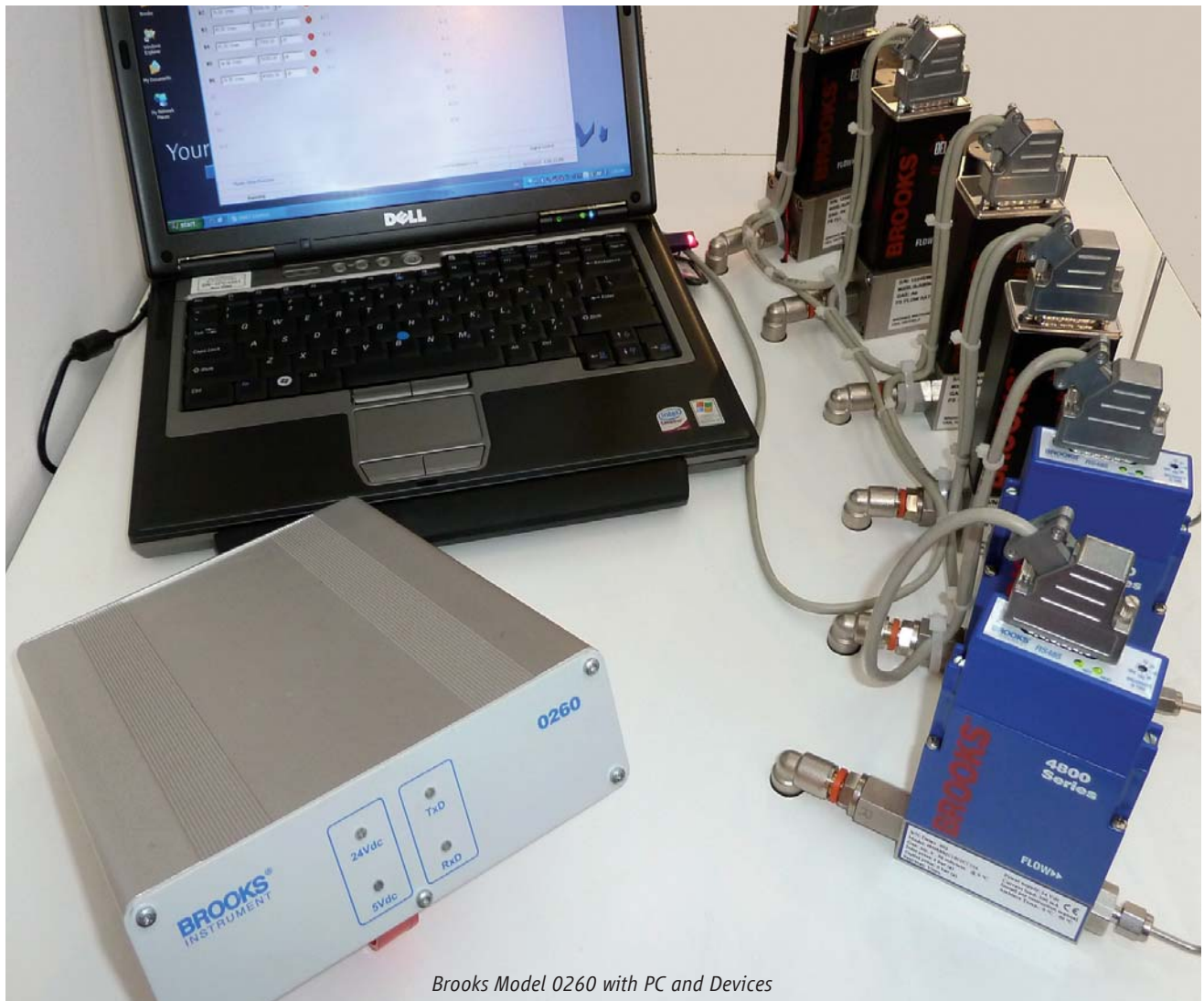
The Brooks Smart Interface software allows the user to display the full scale flow rate, display the measured flow rate, display and adjust the set point, display the device/alarm status and display, and change valve over ride (VOR) status all from the main screen. This software tool also provides data logging, batching, blending and the ability to create automated process recipes.

The Brooks Smart Interface hardware consists of a power supply and RS485 to USB table top hardware module and the interconnecting power and signal cables for the first device. Each hardware module powers up to 10 devices. The Brooks Smart Interface Model 0260 will work with the following Brooks Instrument mass flow product models: 48xxS, 58xxS, SLA58xxS, SLA78xxS, SLA79xxS, MFxxS and SLAMFxxS.



Main Screen in Run Mode

## Product Description



Brooks Model 0260 with PC and Devices

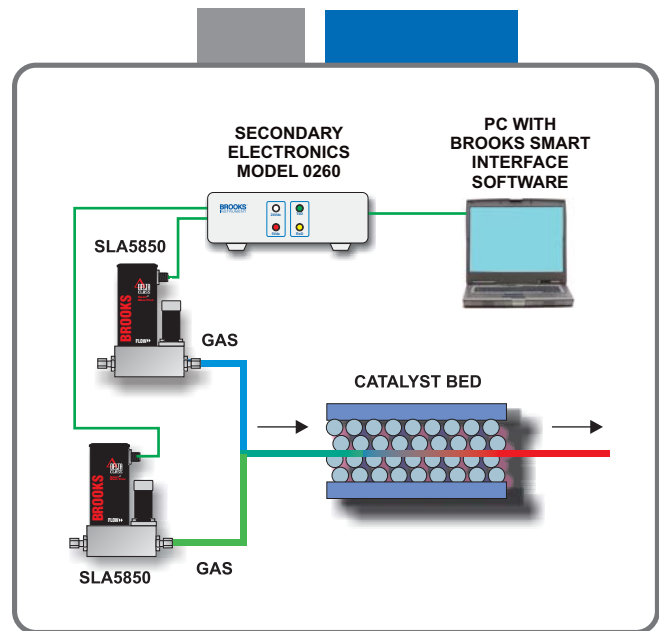
## Features and Benefits

Features	Benefits
Monitor and provide set point control for up to 30 devices	Eliminates the need for multiple secondary electronics boxes which saves space, simplifies wiring and reduces overall cost.
Integrated power supply and RS-485 converter	Along with software this hardware and cable set provides the user with an easy to install "turnkey" solution minimizing setup time and headaches.
Data logging	Allows the user to record, review and graph data.
Recipe control	Ability to store recipes (i.e. set points and times for each channel). Eliminates the need for operator intervention to adjust setpoints at designated times which in turn improves test or process reliability and productivity.
Alarm status exist.	Without changing screens, the user is able to see the device status and read any specific alarm conditions that might exist. If there is an alarm condition, it allows the user to quickly troubleshoot and determine the appropriate action.

## Product Applications

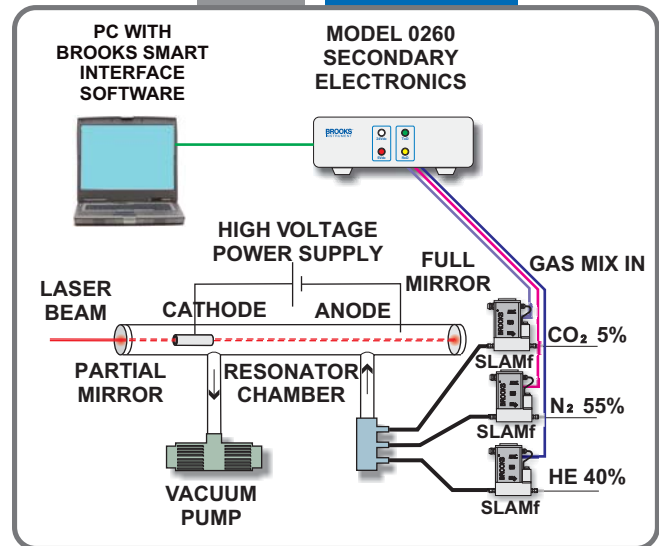
### Catalyst Research

The challenge is scaling up the catalyst process from the laboratory to the pilot plant and, ultimately, to production levels. It is imperative that the amount of feed flowing through the research catalyst bed be precisely measured so that the conversion rate and selectivity can be accurately calculated and scaled-up successfully. Brooks' SLA Series thermal mass flow controllers have been selected by many companies involved in catalyst research because these instruments provide exceptional flow control precision, wide dynamic range, and super stability. The SLA is available for extremely high pressure service and has appropriate area classifications. The Brooks Smart Interface Model 0260 allows the user to monitor and control up to thirty (30) RS485 Smart protocol devices through a user friendly Windows based PC interface.



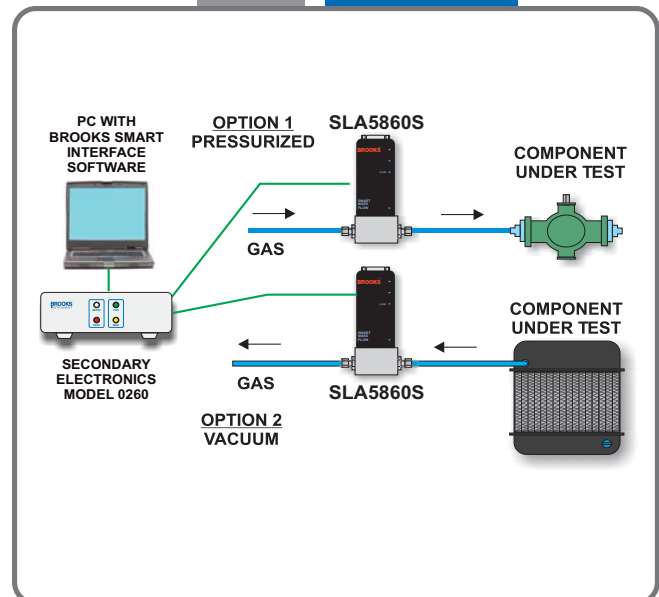
### Heat treating, cutting/welding, and other thermal processes

The thermal process market is diverse, but the application demands are similar: reliable, accurate control of inert shielding gases and excellent control of O<sub>2</sub> to ensure that the desired outcome is achieved time after time. The Model 4850 thermal mass flow controller provides economical thermal mass flow control at flows up to 40 slpm. Leading thermal spray equipment suppliers often select SLAMF Series thermal mass flow controllers because their NEMA 4X/IP66 ingress protection prevents damage from dust and water. Regardless of the mass flow device selected the Brooks Smart Interface Model 0260 allows the user to monitor and control up to thirty (30) RS485 Smart protocol devices through a user friendly Windows based PC interface. The user can also take advantage of the built in recipe and blending capability.



### Device Testing And Metrology

Components and assemblies that are designed against leaks during use can be tested quickly and reliably using Brooks flow meters. This is accomplished by simply applying pressure or vacuum to the device under test and confirming the absence of flow using a Brooks variable area, thermal, or Coriolis flow meter. Examples include valves, radiators, hydraulic and pneumatic assemblies, plumbing fixtures, and more. Components designed to deliver a certain flow rate at a given set of pressure conditions (orifices and nozzles); to have a certain pressure drop at a given flow rate (filters); to have a minimum power output at a given fuel consumption (engines) can also be tested using Brooks flow meters. Fluid handling equipment like pumps, injectors, dispense heads, and even other flow meters can be periodically verified using Brooks flow meters because the accuracy of the Brooks meter is usually far greater than the device under test. The Brooks Smart Interface Model 0260 allows the user to monitor and control up to thirty (30) RS485 Smart protocol devices through a user friendly Windows based PC interface. The data logging capability built into the software allows to user to capture test results for quality assurance or audit purposes.



## Product Specifications

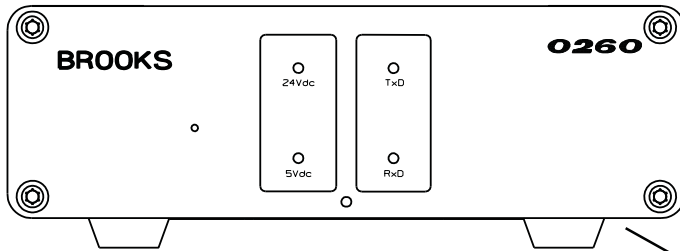
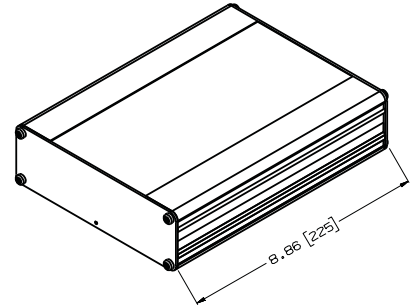
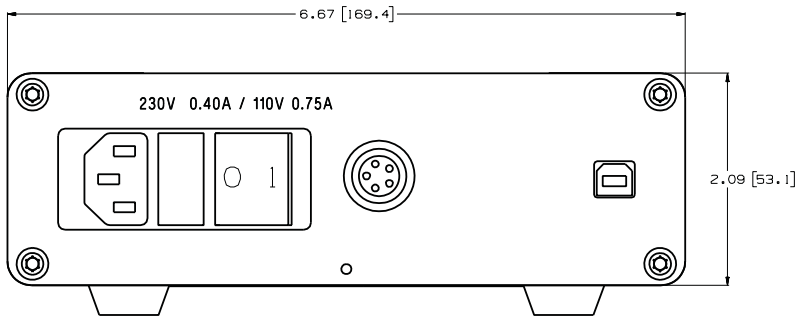
### Hardware

<b>Power Input</b>	85-250 Vac, 47-63 Hz	
<b>Power Output</b>	Voltage: 24 Vdc (-/+10%) Current: 3.5 Amp Will power up to ten (10) Brooks S-Series, SLA Smart II or 4800 Series mass flow meters and/or mass flow controllers	
<b>Power On/Off</b>	Rocker switch on panel	
<b>Fuse</b>	Back panel accessible 2.5 Amp Anti-surge, 5 x 20 mm	
<b>Signal Input/Output</b>	RS-485 "S" Protocol (HART Command Set)	
<b>Status LEDs</b>	Four (4) status LEDs located on the front panel Functionality: 24 Vdc present, 5 Vdc PC to USB-485 converter, Coms RX/TX XZ	
<b>Mounting Options</b>	Table top	
<b>Dimensions</b>	See product dimensions on page 5.	
<b>Temperature/Humidity</b>	Operating: 0-50°C (32-122°F), 0-95% non-condensing. Ship/Storage: -40-85°C (-40-185°F), 0-95% non-condensing.	
<b>Cables</b>	AC Power: Standard North American, European or United Kingdom cables PC Interface: 3 meter (10 ft) cable from 0260 with USB connector at PC Device power and signal: 2 meter (6 ft) cable with circular self latching Lemo 5 way 2B series in-line plug at 0260 and a 15 pin female D connector with a Tyco double entry D15 back shell at the first node/device. Optional custom specified multi drop cable for connection to additional nodes/devices	
<b>Certifications</b>	CE Mark RoHS	EN61326-1 EPD 2002/95/EC, 01Jul2006

### Software

<b>Software Requirements</b>	Microsoft Windows XP (SP2), Vista or 7
<b>Number of Devices</b>	Software runs up to 30 devices
<b>Main Screen Functions</b>	Display full scale flow, display flow rate, display and adjust setpoint, display and change valve override status, provide device/alarm status updates
<b>Totalizer Function</b>	Resettable totalizer available on each channel
<b>Data Logging</b>	Log data includes time stamp, setpoint, flow rate, valve drive, temperature and alarm status
<b>Conversion Factor</b>	Two decimal conversion factor (multiplier) available for each channel
<b>Blending</b>	Each channel defined as stand alone, master or slave channel. There may be up to 15 masters with the balance being either slaves or stand alone
<b>Security</b>	Software will function only if security dongle is installed in PC
<b>Loss of Power</b>	Software configurable for return to last setpoint values or setpoint zero
<b>Recipe</b>	Ability to store recipes (i.e. setpoints and times for each channel)
<b>Languages</b>	English

# Product Dimensions



Labeling on bottom of unit indicates:

- Manufacturer and Address
- Warnings
- Serial Number
- Model Number
- Reference Number
- Agency Approvals

0260 USB-RS485 Dip-Switch & Jumper Settings				
Dip-Switch for Mode Selection:				
Switch:	S1	S2	S3	S4
Half Duplex (2 wire)- without Echo	ON	OFF	OFF	OFF

Jumpers for Communication Line termination/biasing		
1-2	Tx Termination of 120 Ohm	populated
3-4	Pull-up Tx+ (B) to VCC by 750 Ohm Bias resistor	populated
5-6	Pull-down Tx- (A) to GND by 750 Ohm Bias resistor	populated
7-8	Rx Termination of 120 Ohm	not populated
9-10	Pull-up Rx+ to VCC by 750 Ohm Bias resistor	not populated
11-12	Pull-down Rx- to GND by 750 Ohm Bias resistor	not populated
13-14	CTS Termination of 120 Ohm	not populated

Table Top Dimensions

## TRADEMARKS

Brooks ..... Brooks Instrument, LLC  
 HART ..... HART Communication Foundation  
 Microsoft ..... Microsoft Corporation  
 Windows ..... Microsoft Corporation

## Model Code

Code Description	Code Option	Option Description
I. Base Model Code	<b>0260</b>	Secondary electronics
II. Model Revision Level	<b>A</b>	
III. Software Application	<b>A</b>	None
	<b>B</b>	Brooks Smart Interface
IV. Software Distribution	<b>A</b>	N/A (not applicable)
	<b>B</b>	Software Download*
	<b>C</b>	CD Kit
V. Hardware Option	<b>A</b>	None
	<b>B</b>	0260 Hardware
VI. Power Cord for 0260 Hardware, 100-240 Vac	<b>A</b>	None
	<b>B</b>	North American power cord for 120 Vac
	<b>C</b>	European power cord for 220 Vac
	<b>D</b>	United Kingdom power cord for 220 Vac

\*Customer must download software from the Brooks Instrument website (<http://www.BrooksInstrument.com>)

### Sample Model Code

I	II	III	IV	V	VI
<b>0260</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>B</b>	<b>B</b>

## Brooks Service and Support

Brooks is committed to assuring all of our customers receive the ideal flow 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.

### CUSTOMER 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.

### HELP DESK

In case you need technical assistance:

Americas ☎ 1 888 554 FLOW  
 Europe ☎ +31 (0) 318 549 290  
 Asia ☎ +81 3 (0) 5633 7100



Due to Brooks Instrument's commitment to continuous improvement of our products, all specifications are subject to change without notice.

DS-SW-0260-Series-eng (1210)

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