

# APPLICATION DATA SHEET

## CUSTOMER INFORMATION

Contact / End User:	Phone:			
Company:	Email:			
Industry:		Date:		
	APPLICA		ATION	
Application:		STP Co	nditions: 70°F	and 29.92" Hg
Gas or Mixture:			0°C	and 1.013 Bar Abs.
Pipe/Duct Size:			Other:	
MIN	NOF	RM	MAX	UNITS
Flow Rate 0				
Gas Temp				F/C
Pressure				
Amb. Temp.				F/C
	INSTRUME	NT SPECIFIC	ATIONS	
Product Line <sup>1</sup> :	Single Point	Flow Tube	Multipoint	Valumass™
Configuration <sup>2</sup> :	Inline	Insertion	Probe Length	:
Electronics:	Integral	Remote /	Ex-proof (Pg 2)	) General
Input Power:	24 VDC	115 VAC	230 VAC	Other
Display/Keypad:	Yes	Νο		
Communications <sup>3</sup> :	0–5 VDC Modbus RTU	4–20 mA Temperature	RS232 HART	RS485 Profibus DP
Mounting Hardware <sup>4</sup> :	None	Flange(s)	Ball Valve	Comp. Fitting

<sup>1</sup> EPI will assure that the quoted product line is appropriate for the application.

 $^2\,$  Inline style pipe sizes 1/4" to 6"; insertion style intended for 2" or greater

<sup>3</sup> HART and Profibus DP not available with ValuMass<sup>™</sup>

<sup>4</sup> EPI will assure that the quoted mounting hardware is appropriate for the product line.

### ELDRIDGE PRODUCTS, INC.

#### **Specifying Flow Conditions for Your Thermal Mass Flowmeter**

When providing the details of your flow conditions, you must be sure to include certain parameters for the flowmeter to be properly matched to your application. The category descriptions below will help you specify the proper flowmeter:

**Gas Composition** — This is simple if you are flowing air or a pure gas such as hydrogen, nitrogen, etc. Gas mixtures should be provided with each gas listed as a percent of the total, with the sum equal to 100%. Whenever possible, we calibrate your thermal mass flow meter with the actual gas. When this is not possible, we use a gas or gas mixture with equivalent heat transfer characteristics.

**Full Scale Flow Rate** — Although you may not know your exact maximum flow rate (Full Scale), you must provide an estimate for the calibration. If the Full Scale is not known, it is best to over-estimate a flow. This information can be in units of mass/volume flow (SCFM, Lbs/Hr, NCMH, etc.) or velocity (SFPM, MPS, etc.).

**Line Size** — Whether you are interested in an inline style or an insertion style thermal mass flowmeter, we need to know your process line size.

**Process Gas Pressure and Temperature** — We calibrate your thermal mass flowmeter under conditions as close to your process environment as possible.

**Electronics Temperature** — This refers to the ambient temperature of the environment surrounding the flowmeter's electronics. We can provide options for a wide range of conditions.

**Input Power Requirements** — You must specify whether the thermal mass flowmeter will be powered by 24 VDC, 115 VAC, 230 VAC or an optional power source such as 12 VDC or solar panel.

**Configuration** — EPI manufactures both inline and insertion style. We can supply inline style flowmeters for line sizes from 1/4" to 4" with a number of installation options such as MNPT ends, ANSI of DIN flanges, etc. Insertion style flowmeters can be used in line sizes of 2" or greater and can be mounted with ball valve retractor assemblies, compression fittings, pipe nipples, etc.

EPI also manufactures flowmeters with either Integral or Remote Style. The integral configuration is generally less expensive, but the remote style allows easy access to the electronics even when the actual process line installation is in an otherwise inconvenient location.

#### Master-Touch<sup>™</sup> Product Approvals

MP Series Flow Transmitter —	For use in hazardous area locations by CSA/CUS (default except for EU), ATEX (default for EU), IECEX and KOSHA (customer must specify)
MP Series Remote Enclosure —	For use in Ordinary (Non-Hazardous) area locations: Type 4X, IP66 (For use in hazardous area locations optional)
MPNH Series —	For use in Ordinary (Non-Hazardous) area locations: Type 4X, IP66