SUBMITTAL SHEET

MASS-tron II

ULTRA-LOW RANGE DIFFERENTIAL PRESSURE/ FLOW TRANSMITTER

OPTIONS

- ❑ Alarms **or** ❑ AUTO-purge Mgmt
- ❑ Auxiliary Output
- ❑ Terminal Cover/Conduit Connection

Special Functions
- ❑ % Deviation
- ❑ Summed Flow
- ❑ Averaged Flow
- ❑ Differential Flow
- ❑ Low Select
- ❑ High Select

Power
- ❑ 24VAC
- ❑ 20-40VDC
- ❑ 120VACI (via external transformer)

Certification
- ❑ Standard
- ❑ NIST Traceable

Network
- ❑ None (std)
- ❑ Modbus TCP/IP over Ethernet
- ❑ LonWorks

PERFORMANCE SPECIFICATIONS

Accuracy. ±0.1% of Natural Span, including non-linearity, hysteresis, deadband, and non-repeatability.

Stability. ±0.5% of Natural Span for six months.

Temperature Effect
Zero. None; corrected by AUTO-zero.
Span. 0.015% of Full Span/ºF.

Transducer Response Time. 0.5 second to reach 98% of a step change.

Mounting Position Effect. None; corrected by AUTO-zero.

Power Consumption.

	Standard		w/AUTO-purge	
	In Rush	Hold	In Rush	Hold
24VAC	14.4VA	14VA	85VA	73VA
24VDC	9.6W	9.0W	37W	37W
120VAC	19.2VA	18.67VA	106VA	92VA

FUNCTIONAL SPECIFICATIONS

Digital Outputs.
Dual form C dry contacts and dual Form A dry contacts rated for 3 amps at 24VAC/VDC are used for optional High/Low alarms or AUTO-purge activation & acknowledgment.

Digital Inputs.
Dry contact for AUTO-purge external start command.

Analog Outputs.
Four outputs are individually configurable via jumper for 0-5VDC, 0-10VDC, or 4-20mADC.

Analog Inputs.
Dual inputs are field configurable via jumper for 0-5VDC, 0-10VDC, or 4-20mADC. One is reserved for temperature input; the other for use with optional special function.

AUTO-purge Management.
AUTO-purge cycle is initiated via an external dry contact input, or via an internal timer with field selectable frequencies of 1 to 24 hours, in 1 hour increments. Three internal relays provide purge activation & acknowledgment.

Power Supply.
Standard 24VAC (20-28VAC) or 24VDC (20-40VDC), with automatic selection. Optional 120VAC (100-132 VAC), via external transformer.

Low Pass Filtration.
Response time to reach 98% of a step change is adjustable from 2.0 to 250.0 seconds.

Automatic Zeroing.
Accuracy. Within 0.1% of calibrated span.
Frequency. Every 1 to 24 hours on 1 hour intervals.

Overpressure and Static Pressure Limit.
25 psig.

Circuit Protection.
Power input is isolated, fused and reverse polarity protected.

Span and Zero Adjustment.
Digital, via internally located push-buttons.

Displays.
Standard 5 line x 20 character backlit graphical LCD provides five lines of data display. LED's indicate AUTO-zero in progress, CPU activated, AUTO-zero over-ranged, AUTO-purge in progress, and auxiliary alarm "on" status.

Temperature Compensation Selection.
Push-button selection of linearized or non-linear input. Choice of thermocouple (Type E, K, J, and T) or 100 ohm platinum RTD temperature sensor type.

Pressure Compensation.
Absolute pressure (atmosphere or duct static), up to 60"Hg.

Humidity Limits.
0-95% RH, non-condensing.

Temperature Limits.
–20ºF to 180ºF Storage.
+40ºF to 140ºF Operating.

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AIR MONITOR
POWER DIVISION

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