



EMS100 Series Exhaust Measurement Systems

J-TEC's EMS100 Exhaust Measurement System has been designed to operate over a wide dynamic range at temperatures up to 1000°F. Because this System includes an on-board microprocessor and pressure and temperature sensors, it provides very accurate flow measurement of automotive exhaust. This unit provides the same rugged design as J-TEC's other industrial gas, steam and liquid flow meters. No moving parts, low pressure drop, and affordable cost make this product ideal for all critical exhaust flow measurement applications, especially emissions testing requirements.

SPECIFICATIONS

Measured:	Engine Exhaust
Flow rate measured:	See table below
Operating temperature:	-20° to 1000°F (-28° to 538°C)
Accuracy:	+/- 1% of reading
Repeatability:	+/- 1%
Input power:	110 VAC at 20 amps (optional 230 VAC)
Output:	LCD displays, Analog Outputs, and RS-232 serial communication
Construction:	Stainless steel cabinet and wetted parts, with MACOR transducer assembly
Ambient temperature:	-20° to 155°F (-28° to 68°C)
Pressure drop:	Maximum 6" H ₂ O
Response time:	60 ms
Air supply to cool transducers:	Internally generated
Mounting*:	2" Size: Inlet-2.5" Tri-Clamp Outlet-2.0" Tri-Clamp 3" Size: Inlet-3.5" Tri-Clamp Outlet-3.0" Tri-Clamp
Cabinet Dimensions:	23" (58 cm) high x 30" (76 cm) wide x 19" (48 cm) deep
Flow Tube Length:	38" (97 cm)
Weight:	100 pounds

*Consult factory for other mounting options.

FLOW RANGES								
For reference only. Consult factory for other line sizes								
Temp °F	ACFM				SCFM			
	2"		3"		2"		3"	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
-20	3	220	10	450	4	260	12	532
0	3	220	10	450	3	249	11	509
40	3	220	10	450	3	229	10	468
60	3	220	10	450	3	220	10	450
200	3	220	10	450	2	173	8	354
250	3	220	10	450	2	161	7	330
400	3	220	10	450	2	133	6	272
500	3	220	10	450	2	119	5	244
800	3	220	10	450	1	91	4	186
1000	3	220	10	450	1	78	4	160