Model 8710
DP-CALC™ Micromanometer



The Model 8710 DP-CALC Micromanometer is a comprehensive measurement solution for industrial hygienists, certification personnel and HVAC professionals who measure pressure, temperature, velocity and flow. This innovative instrument features a velocity matrix, auto zero and low-flow accuracy for fast, reliable measurements. The Model 8710 also offers ergonomic design, full data logging, and TSI's fast factory service.

Applications:

- Fume hood and biological safety cabinet face velocity spot checking
- HVAC system testing, adjusting and balancing
- Building and system commissioning
- Energy efficiency studies
- Clean-room testing
- Industrial hygiene studies
- Regulatory compliance checks

Additional Features:

- Modular kit options to meet your application and budget requirements
- Time-saving features for more readings per day
- 16-point velocity matrix for quick averaged readings per square foot
- Auto-zeroing technology eliminates manual zero calibrations between readings
- Accurate even in low range conditions
- Easy-to-read multi-line display with icons
- Longer battery life (12 hours) and faster recharge time than other currently available micromanometers
- TSI's LogDat™ downloading software included at no additional charge
- Fast, economical factory service ensures quality workmanship and quick turnaround

Specifications

Model 8710 DP-Calc Micromanometer

Differential Pressure	
Range	±15 in. wc (3735 Pa); 150 in. wc maximum safe operating pressure
Accuracy	2% of reading; ±0.001 in. wc (0.025 mm wc) from 0.050 to 15 in. wc
Resolution	0.00001 in. wc (0.001 Pa)
Absolute Pressure	
Range	15 to 40 in. Hg (356 to 1016 mm Hg)
Accuracy	2% of reading
Resolution	0.001 in. Hg (1 mm Hg)
Air Velocity*	
Range	25 to 8,000 ft/min (0.13 to 41 m/s) Pitot Probe 25 to 5,000 ft/min (0.13 to 25 m/s) Air Flow Probe 25 to 2,500 ft/min (0.13 to 13 m/s) Velocity Matrix
Accuracy	3% of reading; ±7 ft/min (0.04 m/s)** All Probes
Resolution	0.1 ft/min (0.1 m/s)
Temperature Probe*	
Range	-40 to 250 °F (-40 to 121 °C) probe dependent
Accuracy	±0.5 °F (0.3 °C) from 32 to 160 °F (0 to 71°C); typically ±1.0 °F (0.6 °C) from -40 to 32 °F (-40 to 0 °C) and from 160 to 250 °F (71 to 121 °C)
Resolution	0.1 °F (0.1 °C)
Relative Humidity Probe*	
Range	0 to 95% RH
Accuracy	3% RH
Resolution	0.1% RH
Averaging Capability	Up to 1,000 values each of measured parameter
Sampling Interval	Continuous or user selectable (10 to 600 s)
Response Time	2 to 8 s
Size	
External Dimensions	7.4 in. × 4.5 in. × 2.3 in. (18.8 cm × 11.4 cm × 5.8 cm)
Weight with Batteries	17 oz (0.5 kg)

Specifications are subject to change without notice.

Instrument Operating Range	40 to 140 °F (4.4 to 60 °C)
Meter Display	6 digit LCD, 0.75 in. character height, multi-line sectored high contrast backlit
Power	4 AA-size batteries rechargeable NiMH (included) or alkaline, AC adaptor
Battery Life	12 hr
Battery Recharge Time	1 hr (external charger), 5 hr (internal charger)
Warranty	2-yr factory warranty

* These specifications apply only when the applicable accessory probes are used with the Model 8710 Micromanometer.

**At >50 ft/min

Accessories Available

A variety of optional or spare probes are available. Consult TSI or your local distributor for a full listing of available accessories and probes.

Model Selection Chart

Model	Manometer	Air Flow	Velocity Matrix	Temp	RH & Temp
8710-AN1	•				
8710-VN1	•		•		
8710-OH1	•		•	•	
8710-XX1	•	•	•	•	•

All models include: Model 8710 DP-Calc Micromanometer, carrying case, 18-in. (45.7 cm) pitot probe, two static pressure probes, 16-ft (5 m) Neoprene tubing, battery charger (internal & external), 4-AA rechargeable NiMH batteries, AC adaptor, LogDat downloading software, NIST traceable calibration certificate and manual.



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