

# Model 8710 DP-CALC™ Micromanometer



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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.

The Model 8710 with the available velocity matrix is an excellent value for industrial hygienists and certification professionals for spot-checking clean rooms, biological safety cabinets, fume hoods and filter face velocities.

Users will also appreciate the light weight, low-range accuracy and long battery life.

The Model 8710 DP-CALC is also a great new alternative for HVAC professionals. Unlike other micromanometers, the auto-zeroing technology ensures every measurement is accurate and dependable.



# ...the Comprehensive Measurement Solution

## *Velocity Matrix for Fast Face Velocities*

The available velocity matrix accessory probe lets you quickly obtain an averaged 16-point measurement over a square-foot area. With the velocity matrix, the Model 8710 DP-CALC Micromanometer is ideally suited for a variety of general face velocity measurements, including HEPA clean-room filters, large air filters, coils, fume hoods and bio-safety cabinets. An adjustable telescoping extension handle enables convenient positioning and increased instrument versatility.



## *Auto-Zero Technology*

The Model 8710 comes with automatic-zeroing technology to ensure each measurement starts from the same reference point. You can count on the Model 8710 DP-CALC to provide dependable measurements for reliable reporting. With automatic zeroing, you save time by eliminating manual zero calibrations between readings.

## *Exceptional Accuracy Even at Very Low Ranges*

The Model 8710 sensor accurately measures pressure from 0.0500 to 15.00 in. wc. Accuracy is maintained in the low range, ensuring repeatable measurements in low-velocity applications such as biological safety cabinets. You can be confident that your reports are based on dependable readings.

## *Additional Features*

- Modular kit options to meet your application and budget requirements
- Time-saving features for more readings per day
- 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 (0.00025 mm wc)

#### Absolute Pressure

Range 15 to 40 in. Hg (356 to 1016 mm Hg)

Accuracy 2% of reading

Resolution 0.01 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

#### 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)

#### 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.



Specifications are subject to change without notice.



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