

IAQ-CALC™

Indoor Air Quality Meters

Models 8732, 8760, 8762

TSI's IAQ-CALC™ Meters are exceptional instruments for investigating and monitoring Indoor Air Quality (IAQ). The Model 8732 is a cost-effective meter for CO₂ measurements. The Models 8760 and 8762 simultaneously measure and data log multiple parameters to monitor indoor air quality conditions. The Model 8760 measures CO₂, temperature, humidity, and calculates dew point, wet bulb temperature, absolute humidity, humidity ratio and % outside air. The Model 8762 adds CO.

Features and Benefits- All Models

- Low-drift NDIR CO₂ sensor ensures stable, accurate readings
- Sampling function records multiple point measurements
- Optional portable printer provides hard copy documentation

Models 8760 and 8762

- Temperature and relative humidity measurements help determine thermal comfort levels
- Calculates % outside air from either CO₂ or temperature readings
- Directly calculates dew point, wet bulb temperature, absolute humidity and humidity ratio—no psychrometric chart needed
- Electrochemical sensor measures CO at outdoor air intakes, HVAC systems and parking garages (Model 8762 only)
- Two-line display shows multiple parameters simultaneously
- Optional detachable secondary temperature sensor measures temperature at heat sources and investigates thermal gradients

Data Logging Capabilities- Models 8760 and 8762

- Data logging allows user to log 14,000 samples with a time and date stamp
- Simultaneously records all parameters available
- Continuous data logging enables full-cycle monitoring and trend analysis
- TSI LOGDAT™ downloading software permits easy transfer of data to a computer
- LOGDAT Companion Excel® Macro automatically graphs your data
- Data can be reviewed on-screen, printed or downloaded to a computer for easy report generation
- Statistics function displays average, maximum and minimum values, and the number of recorded samples

Applications

- Measure IAQ and comfort conditions in schools, offices and other indoor environments
- Investigate Sick Building Syndrome and building related illnesses
- Verify building HVAC system performance
- Examine building IAQ conditions to optimize worker productivity
- Comply with regulations and guidelines



Models 8732, 8760, and 8762 IAQ-CALC Meters

Specifications

CO₂:

Sensor Type: Dual-wavelength NDIR (non-dispersive infrared)
Range: 0 to 5000 ppm
Accuracy¹: ±3.0% of reading or ±50 ppm, whichever is greater
Resolution: 1 ppm

Temperature (Models 8760 and 8762):

Sensor Type: Thermistor
Range: 0 to 60°C (32 to 140°F)
Accuracy: ±0.6°C (±1.0°F)
Resolution: 0.1°C (0.1°F)

Optional Secondary Temperature Probe (Models 8760 and 8762):

Sensor Type: RTD
Range: -40 to 120°C (-40 to 248°F)
Accuracy²: ±0.6°C (±1.0°F)
Resolution: 0.1°C (0.1°F)

Relative Humidity (Models 8760 and 8762):

Sensor Type: Thin-film capacitive
Range: 5% to 95% RH
Accuracy³: ±2.0% RH
Resolution: 0.1% RH

Dew Point (Models 8760 and 8762):

Range: -15 to 49°C (5 to 120°F)
Resolution: 0.1°C (0.1°F)

Wet Bulb Temperature (Models 8760 and 8762):

Range: 5 to 60°C (40 to 140°F)
Resolution: 0.1°C (0.1°F)

Absolute Humidity (Models 8760 and 8762):

Range: 0.24 to 79.0 g moisture/m³ air
 (.0000151 to .00491 lbs moisture/ft³ air)

Humidity Ratio (Models 8760 and 8762):

Range: 0.14 to 187 g moisture/kg dry air
 (0.00014 to 0.187 lbs moisture/lb dry air)

% Outside Air (Models 8760 and 8762):

Range: 0 to 100%
Resolution: 0.1%

All specifications subject to change without notice.

¹ At 25°C (77°F). Add uncertainty of ±0.36%/°C (±0.2%/°F) away from calibrated temperature.

² For range of -5 to 95°C (23 to 203°F)

³ At 25°C (77°F). Add uncertainty of ±0.05% RH/°C (±0.03% RH/°F) away from calibrated temperature.

CO (Model 8762):

Sensor Type: Electro-chemical
Range: 0-500 ppm
Accuracy: ±3.0% of reading or ±3 ppm, whichever is greater
Resolution: 0.1 ppm
Response Time: <60 sec to 90% step change

Operating Temperature:

Models 8732 and 8760: 5 to 70°C (41 to 158°F)
Model 8762: 5 to 45°C (41 to 113°F)

Storage Temperature: -20 to 70°C (-4 to 158°F)

Logging Capability (Models 8760 and 8762):

Range: Up to 14,000 samples and 1,000 test id's
Intervals: 5 sec, 10 sec, 15 sec, 20 sec, 30 sec, 60 sec, 2 min, 5 min, 10 min, 15 min, 20 min, 30 min, 60 min

Meter Dimensions: 100 mm × 168 mm × 38 mm
 (3.9 in. × 6.6 in. × 1.5 in.)

Probe Dimensions (Model 8760):

Length: 14.5 cm (5.81 in.)
Diameter: 1.9 cm (0.75 in.)

Probe Dimensions (Model 8762):

Length: 16.5 cm (6.50 in.)
Diameter: 1.9 cm (0.75 in.)

Weight (with batteries):

Model 8732: 0.34 kg (0.76 lbs)
Models 8760 and 8762: 0.53 kg (1.16 lbs)

Power : Four AA-size batteries (included) or AC adapter (included with Models 8760 and 8762)

Printer Interface: 1200 baud rate, serial connection

Features	8732	8760	8762
CO ₂	●	●	●
CO			●
Temperature		●	●
Humidity		●	●
% Outside Air		●	●
Dew Point		●	●
Wet Bulb Temperature		●	●
Absolute Humidity		●	●
Humidity Ratio		●	●
Data Logging/Downloading		●	●
Statistics	●	●	●
Review Data		●	●
Printer Output	●	●	●
NIST* Calibration Certificate	●	●	●

* U.S. National Institute of Standards and Technology.



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