

IAQ-CALC™ Indoor Air Quality Meters

Models 8732, 8760 and 8762

TSI's IAQ-CALC Meters are outstanding 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. 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

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

Models 8760 and 8762

- Temperature and relative humidity measurements help determine thermal comfort
- Calculates % outside air from either CO₂ or temperature
- Directly calculates dew point, wet bulb temperature, absolute humidity and humidity ratio
- Electrochemical sensor measures CO (Model 8762)
- Two-line display shows two parameters simultaneously



Model 8762

Data Logging-Models 8760 and 8762

- Simultaneously records all parameters and logs up to 14,000 samples with time and date stamp
- TSI LOGDAT™ software permits easy transfer of data to a computer
- 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

- Verify building HVAC system performance
- Examine building IAQ conditions to optimize worker productivity
- Comply with regulations and guidelines

Models 8732, 8760 and 8762

Specifications

CO₂

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

Temperature (Models 8760 and 8762)

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

Optional Secondary Temperature Probe (Models 8760 and 8762):

Sensor Type	RTD
Range	-40 to 248°F (-40 to 120°C)
Accuracy ²	±1.0°F (±0.6°C)
Resolution	0.1°F (0.1°C)

Relative Humidity (Models 8760 and 8762)

Sensor Type	Thin-film capacitive
Range	5% to 95% RH
Accuracy ³	±3.0% RH
Resolution	0.1% RH

Dew Point (Models 8760 and 8762)

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

Wet Bulb Temperature (Models 8760 and 8762)

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

Absolute Humidity (Models 8760 and 8762)

Range	0.0000151 to 0.00491 lbs moisture/ft ³ air (0.24 to 79.0 g moisture/m ³ air)
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Humidity Ratio (Models 8760 and 8762)

Range	0.00014 to 0.187 lbs moisture/lb dry air (0.14 to 187 g moisture/kg dry air)
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% Outside Air (Models 8760 and 8762)

Range	0 to 100%
Resolution	0.1%

CO (Model 8762)

Sensor Type	Electro-chemical
Range	0 to 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	41 to 158°F (5 to 70°C)
Model 8762	41 to 113°F (5 to 45°C)

Storage Temperature

-4 to 158°F (-20 to 70°C)

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

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

Probe Dimensions (Model 8760)

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

Probe Dimensions (Model 8762)

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

Weight (with batteries)

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

Power

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

Printer Interface

1200 baud rate, serial connection

Model	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
8732	●									●			●	
8760	●		●	●	●	●	●	●	●	●	●	●	●	●
8762	●	●	●	●	●	●	●	●	●	●	●	●	●	●

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

All specifications subject to change without notice.

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

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

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



TSI Incorporated

500 Cardigan Road, Shoreview, MN 55126 USA
Tel: 651 490 2811 Toll Free: 1 800 874 2811 Fax: 651 490 3824 E-mail: answers@tsi.com

TSI Germany—Tel: +49-241-523030 Fax: +49-241-5230349 E-mail: tsigmbh@tsi.com

TSI Sweden—Tel: +46 8-595 132 30 Fax: +46 8-595 132 39 E-mail: tsiab@tsi.com

TSI United Kingdom—Tel: +44 1275-847837 Fax: +44 1275-842437 E-mail: tsiuk@tsi.com

TSI China—Tel: +86-10-8260 1595 Fax: +86-10-8260 1597 E-mail: tsichina@tsi.com

For current information
www.tsi.com

