

ENERGY AND COMFORT

Indoor Air Quality Instruments



Model 7575

Features and Benefits

- Model 7575 simultaneously measure CO₂, CO, temperature and humidity
- Calculates dew point, wet bulb and percent outside air
- Large graphic display
 - Displays up to 5 measurements
 - On-screen messages and instructions
 - Supports 12 different languages
- One instrument with multiple plug-in probe options including VOC's and air velocity
- Store up to 39 days of data collected at one-minute log intervals
- TRAKPRO™ data analysis software provided for data logging, analysis and documenting results
- Bluetooth communications for transferring data or remote polling

Q-TRAK™ Multi-Function Indoor Air Quality Monitor Model 7575

Providing a comfortable, safe and healthy indoor environment is an increasingly important concern. Good indoor air quality increases concentration and productivity which can reduce lost days due to absence. TSI's Q-TRAK™ IAQ Monitor is a handheld, multi-function test instrument which features a menu-driven user interface for easy operation and provides quick, accurate information to measure and assess key IAQ parameters.

On-screen prompts and step-by-step instructions guide the user through operation, instrument setup and field calibration. The Q-TRAK IAQ Monitor 7575 also features an ergonomic, over molded case design with probe holder and a keypad lockout to prevent tampering during unattended use. The Q-TRAK IAQ Monitor 7575 is designed to work with a wide range of plug-in probes which expands measurement capability.

Applications

- IAQ investigations
- Industrial hygiene surveys
- Baseline trending and screening
- Building commissioning
- Tracking down emissions to their source (point source location)





Q-TRAK IAQ Monitor Plug-In Probes

The plug-in probe accessories allow users to make various measurements by simply plugging in a different probe that has the features and functions best suited for a particular application. Plug-in probes for the Q-TRAK IAQ Monitor can be ordered at any time and include a data sheet with certificate of traceability. When it's time for servicing, only the probe needs to be returned since all the calibration data is stored within the probe.

Indoor Air Quality (IAQ) Probes

A good indicator of proper ventilation is the level of CO₂ present in a space. Carbon dioxide is a normal by-product of occupant respiration. Elevated levels of CO₂ may indicate that additional dilution ventilation is required.

IAQ probes are available to measure temperature, humidity, CO and CO₂ of indoor environments. Calculations include percent outside air, wet bulb and dew point temperatures. The IAQ probes feature field calibration capability, and the CO sensor in the Model 982 is field replaceable.

Volatile Organic Compounds (VOC) Probes

Volatile Organic Compounds (VOCs) are organic-based chemicals emitted as gases or vapors from solids or liquids that vaporize at room temperatures. Health effects from inhaling VOC's depend on the type of chemical, amount in the air (concentration in ppm or ppb), how long a person is exposed, and personal sensitivity to a given VOC.

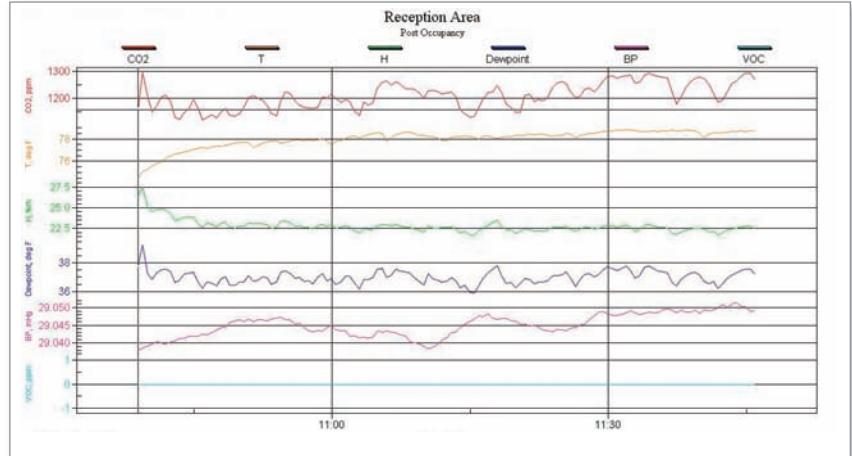
VOC probes are available to measure temperature, humidity, VOC and CO₂ or just VOC and temperature. Calculations include percent outside air, wet bulb and dew point temperatures. VOC exposure in mass concentration can be calculated by inputting the molecular weight and response factor for a particular VOC. The VOC probes feature field calibration, maintenance and replacement sensors.



Data Collection and Reporting

Expanded data logging capacity and the inclusion of TRAKPRO Data Analysis Software provides the capabilities to work more effectively and efficiently. The Q-TRAK can store up to 39 days of data collected at one-minute log intervals which is useful for investigating trends, performance or complaints. The stored data can be recalled, reviewed on screen, and downloaded for easy reporting. TRAKPRO helps you to generate professional graphs for your reports.

- Log multiple parameters to investigate trends
- User selectable logging intervals and start/stop times
- Download data to data analysis software
 - Report generation
 - Graph creation
 - Instrument programming



Probe Specifications

Models 980, 982, 792, 794, 984, 985, 986, 987, 960, 962, 964, 966, 496, and 995

980 IAQ Probes CO₂, Temperature and Humidity

Range	0 to 5,000 ppm CO ₂ , 5 to 95% RH, 14 to 140°F (-10 to 60°C)
Accuracy	±3% of reading or ±50 ppm, whichever is greater ⁹ CO ₂ ±3% RH ⁷ ±1.0°F (±0.5°C) ⁶
Resolution	1 ppm CO ₂ 0.1% RH 0.1°F (0.1°C)

982 IAQ Probes Model CO, CO₂, Temperature and Humidity

Range	0 to 500 ppm CO 0 to 5,000 ppm CO ₂ 5 to 95% RH 14 to 140°F (-10 to 60°C)
Accuracy	±3% of reading or ±3 ppm, whichever is greater ⁸ ±3% of reading or ±50 ppm, whichever is greater ⁹ CO ₂ ±3% RH ⁷ ±1.0°F (±0.5°C) ⁶
Resolution	0.1 ppm CO 1 ppm CO ₂ 0.1% RH 0.1°F (0.1°C)

792 and 794 Thermocouple Probes Temperature

Range	-40 to 1,200°F (-40 to 650°C)
Accuracy	±0.1% of reading +2°F (±0.056% of reading +1.1°C)
Resolution	0.1°F (0.1°C)

Model 984 Low Concentration (ppb) VOC and Temperature

Range	10 to 20,000 ppb, 14 to 140°F (-10 to 60°C)
Accuracy	±1.0°F (±0.5°C) ¹
Resolution	Up to 10 ppb, 0.1°F (0.1°C)

Model 985 High Concentration (ppm) VOC and Temperature

Range	1 to 2,000 ppm, 14 to 140°F (-10 to 60°C)
Accuracy	±1.0°F (±0.5°C) ¹
Resolution	Up to 10 ppm, 0.1°F (0.1°C)

Model 986 Low Concentration (ppb) VOC, Temperature, CO₂, and Humidity

Range	10 to 20,000 ppb, 0 to 5,000 ppm CO ₂ 14 to 140°F (-10 to 60°C), 5 to 95% RH
Accuracy	±3% of reading or 50 ppm, whichever is greater ±1.0°F (±0.5°C) ¹ , ±3% RH ²
Resolution	Up to 10 ppb, 0.1 ppm CO ₂ , 0.1°F (0.1°C), 0.1% RH

Model 987 High Concentration (ppm) VOC, Temperature, CO₂, and Humidity

Range	1 to 2,000 ppm, 0 to 5,000 ppm CO ₂ 14 to 140°F (-10 to 60°C), 5 to 95% RH
Accuracy	±3% of reading or 50 ppm, whichever is greater ±1.0°F (±0.5°C) ¹ , ±3% RH ²
Resolution	Up to 10 ppm, 0.1 ppm CO ₂ , 0.1°F (0.1°C), 0.1% RH

960 Thermoanemometer Straight Probe Velocity and Temperature

Range	0 to 9,999 ft/min (0 to 50 m/s) 0 to 200°F (-18 to 93°C)
Accuracy	±3% of reading or ±3 ft/min (±0.015 m/s), whichever is greater ^{4&5} ±0.5°F (±0.3°C) ⁶
Resolution	1 ft/min (0.01 m/s) 0.1°F (0.1°C)

962 Thermoanemometer Articulating Probe Velocity and Temperature

Range	0 to 9,999 ft/min (0 to 50 m/s) 0 to 200°F (-18 to 93°C)
Accuracy	±3% of reading or ±3 ft/min (±0.015 m/s), whichever is greater ^{4&5} ±0.5°F (±0.3°C) ⁶
Resolution	1 ft/min (0.01 m/s) 0.1°F (0.1°C)

964 Thermoanemometer Straight Probe Velocity, Temperature and Humidity

Range	0 to 9,999 ft/min (0 to 50 m/s) 14 to 140°F (-10 to 60°C), 5 to 95% RH
Accuracy	±3% of reading or ±3 ft/min (±0.015 m/s), whichever is greater ^{4&5} ±0.5°F (±0.3°C) ⁶ ±3% RH ⁷
Resolution	1 ft/min (0.01 m/s) 0.1°F (0.1°C)

966 Thermoanemometer Articulating Probe Velocity, Temperature and Humidity

Range	0 to 9,999 ft/min (0 to 50 m/s) 14 to 140°F (-10 to 60°C), 5 to 95% RH
Accuracy	±3% of reading or ±3 ft/min (±0.015 m/s), whichever is greater ^{4&5} ±0.5°F (±0.3°C) ⁶ ±3% RH ⁷
Resolution	1 ft/min (0.01 m/s) 0.1°F (0.1°C)

496 Rotating Vane 1.5 in. (35 mm) Velocity and Temperature

Range	100 to 3,000 ft/min (0.50 to 15.00 m/s) 32 to 140°F (0 to 60°C)
Accuracy	±3% of reading ±4 ft/min (±0.02 m/s) ±2.0°F (±1.0°C)
Resolution	1 ft/min (0.01 m/s) 0.1°F (0.1°C)

995 Rotating Vane 4 in. (100 mm) Probe Velocity and Temperature

Range	50 to 6,000 ft/min (0.25 to 30 m/s) 32 to 140°F (0 to 60°C)
Accuracy	±1% of reading ±4 ft/min (±0.02 m/s) ±2.0°F (±1.0°C)
Resolution	1 ft/min (0.01 m/s) 0.1°F (0.1°C)

Indoor Air Quality Instruments

Specifications

Q-TRAK Model 7575 (includes Model 982 Probe)

Carbon Monoxide (IAQ Probe Model 982)

Sensor Type	Electro-chemical
Range	0 to 500 ppm
Accuracy ¹	±3% of reading or 3 ppm, whichever is greater
Resolution	0.1 ppm
Response Time	<60 seconds to 90% step change

Carbon Dioxide (IAQ Probe Models 980 and 982)

Sensor Type	Dual-wavelength NDIR (non-dispersive infrared)
Range	0 to 5,000 ppm
Accuracy ²	±3.0% of reading or ±50 ppm, whichever is greater
Resolution	1 ppm
Response Time	20 seconds

Temperature (IAQ Probe Models 980 and 982)

Sensor Type	Thermistor
Range	32 to 140°F (0 to 60°C)
Accuracy	±1.0°F (0.5°C)
Resolution	0.1°F (0.1°C)
Response Time	30 seconds (90% of final value, air velocity at 400 ft/min [2 m/s])

Relative Humidity (IAQ Probe Models 980 and 982)

Sensor Type	Thin-film capacitive
Range	5 to 95% RH
Accuracy ³	±3% RH
Resolution	0.1% RH
Response Time	20 seconds (for 63% of final value)

% Outside Air

Range	0 to 100%
Resolution	0.1%

Barometric Pressure

Range	20.36 to 36.648 in. Hg (517.15 to 930.87 mm Hg)
Accuracy	±2% of reading

Operating Temperature

40 to 113°F (5 to 45°C)

Storage Temperature

-4 to 146°F (-20 to 60°C)

Logging Capability

Range	Logs up to 56,035 data points with key (4) measured parameters enabled, 39 days at 1-minute log intervals
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Time Constants

1 sec, 5 sec, 10 sec, 20 sec, 30 sec (user selectable)

Log Intervals

1 second up to 1 hour (user selectable)

TSI Incorporated - 500 Cardigan Road, Shoreview, MN 55126-3996 USA

USA Tel: +1 800 874 2811

E-mail: info@tsi.com

Website: www.tsi.com

UK Tel: +44 149 4 459200

E-mail: tsuk@tsi.com

Website: www.tsinc.co.uk

France Tel: +33 491 11 87 64

E-mail: tsifrance@tsi.com

Website: www.tsini.fr

Germany Tel: +49 241 523030

E-mail: tsigmbh@tsi.com

Website: www.tsini.de

India Tel: +91 80 41132470

E-mail: ts-india@tsi.com

Website: www.tsini.de

China Tel: +86 10 8251 6588

E-mail: tsibeijing@tsi.com

Website: www.tsini.de

Singapore Tel: +65 6595 6388

E-mail: ts-singapore@tsi.com

Contact your local TSI Distributor or visit our website www.tsi.com for more detailed specifications.

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Meter Dimensions

3.8 in. x 8.3 in. x 2.1 in. (9.7 cm x 21.1 cm x 5.3 cm)

Probe Dimensions

Length 7.0 in. (17.8 cm)

Diameter 0.75 in. (1.9 cm)

Weight (with batteries)

0.8 lbs (0.36 kg)

Power Requirements

Four AA-size alkaline batteries or AC adapter, both included

To Order

Multi-function IAQ Monitor and Probe

Specify Description

7575 Multi-function IAQ meter 7575-X with IAQ probe Model 982

Multi-function IAQ Monitor Only. Choose a probe most appropriate for your measurement needs.

Specify Description

7575-X Multi-function IAQ meter, no plug-in probes

NOTE: All models include: Instrument, hard carrying case, 4 alkaline batteries, USB cable, universal power supply, instruction manual, calibration certificate, and TRAKPRO downloading software.

¹ Pressure velocity measurements are not recommended below 1,000 ft/min (5 m/s) and are best suited to velocities over 2,000 ft/min (10.0 m/s). Range can vary depending on barometric pressure.² Accuracy is a function of converting pressure to velocity. Conversion accuracy improves when actual pressure values increase.³ Overpressure range = 190 in. H₂O (360 mmHg, 48 kPa).⁴ Temperature compensated over an air temperature range of 40 to 150°F (5 to 65°C).⁵ The accuracy statement begins at 30 ft/min through 9,999 ft/min (0.15 m/s through 50 m/s).⁶ Accuracy with instrument case at 77°F (25°C), add uncertainty of 0.05°F/F (0.03°C/C) for change in instrument temperature.⁷ Accuracy with probe at 77°F (25°C). Add uncertainty of 0.1% RH/F (0.2% RH/C) for change in probe temperature. Includes 1% hysteresis.⁸ At 77°F (25°C). Add uncertainty of ±0.2%/F (0.36%/C) for change in temperature.⁹ At calibration temperature. Add uncertainty of ±0.28%/F (0.5%/C) for change in temperature.