# VOLATILE ORGANIC COMPOUNDS (VOC) INDOOR AIR QUALITY PROBES MODELS 984, 985, 986 & 987

TSI VOC probes are pre-calibrated, plug-and-play accessory probes for multi-purpose meters including, Q-Trak<sup>TM</sup> Monitor 7575, VelociCalc® meter 9565 and Airflow<sup>TM</sup> Instruments TA465 meter. When combined with these meters, long-term data analysis can be performed and reported, which is useful for monitoring or investigating the indoor environment.



#### **Applications**

- + IAQ investigations
- + Industrial hygiene surveys
- + Building commissioning
- + Track down emissions to their source

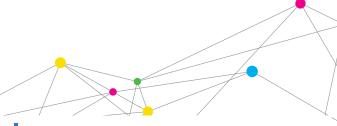
### **Data Collection and Reporting**

Expanded data logging capacity and the inclusion of TrakPro™ Data Analysis Software provides the capabilities to work more effectively and efficiently. The Q-Trak monitor can store up to 38.9 days of data collected at one-minute log intervals. The stored data can be recalled, reviewed on screen, and downloaded for easy reporting. TrakPro software helps you to generate professional graphs for your reports.

#### **Features and Benefits**

- + Pre-calibrated plug-and-play accessory probes for TSI Q-Trak Monitor 7575, VelociCalc Meter 9565 and Airflow Instruments TA465 Meter
- + Compact design with ergonomic handle
- + Four versions available with multiple measurement capabilities
- Model 984 Low concentration (ppb) VOC and temperature
- Model 985 High concentration (ppm) VOC and temperature
- Model 986 Low concentration (ppb) VOC, temperature,  $\mathrm{CO_2}$  and humidity
- Model 987 High concentration (ppm) VOC, temperature,  $CO_2$  and humidity
- + Two-year factory warranty
- + Send only the probe back for factory calibration





# **SPECIFICATIONS**

# VOLATILE ORGANIC COMPOUNDS (VOC) INDOOR AIR QUALITY PROBES MODELS 984, 985, 986, AND 987

#### **Field Service**

TSI VOC probes are competitively priced to others in the marketplace but feature a lower cost of ownership due its compact design and construction, which is geared for field service capability.

- + Field calibration
  - Temperature
  - Relative humidity
  - Volatile organic compounds (VOC)
  - Carbon dioxide (CO<sub>2</sub>)
- + Replaceable sensors
- + Sensor maintenance
  - Lamp cleaning
  - Lamp replacement





#### Instrumentation

The O-Trak Monitor 7575, VelociCalc Meter 9565 and Airflow Instruments TA465 Meter feature a menu-driven user interface for easy operation. VOC probes are also compatible with Airflow™ Instruments TA460 series and TSI's discontinued 7565 and 9555 series, if instrument firmware is at revision 2.10 or higher.

On-screen prompts and step-by-step instructions guide the user through operation and field calibration. These instruments also feature an ergonomic, over molded case design and a keypad lockout to prevent tampering during unattended use.

- + Display up to five measurements simultaneously
- + Log multiple parameters to investigate trends
- + Calculate dew point, wet bulb and percent outside air (VOC models 986 and 987)
- + Store up to 38.9 days of data collected at one-minute log intervals when used with the Q-Trak 7575 Meter
- + User selectable logging intervals and start/stop times
- + Internal barometric pressure sensor
- + Download data to TrakPro Data Analysis Software
  - Report generation
  - Graph creation
  - Instrument programming



#### Model 984 Low Concentration (ppb) VOC and Temperature

10 to 20,000 ppb, Range

14 to 140°F (-10 to 60°C)

Accuracy ±1.0°F (±0.5°C)1 Resolution 10 ppb4, 0.1°F (0.1°C)

#### Model 985 High Concentration (ppm) VOC and Temperature

1 to 2,000 ppm, 14 to 140°F (-10 to 60°C)

±1.0°F (±0.5°C)1 Accuracy Resolution 1 ppm<sup>4</sup>, 0.1°F (0.1°C)

# Model 986 Low Concentration (ppb) VOC,

Temperature, CO,, and Humidity

10 to 20,000 ppb VOC, 0 to 5,000 ppm CO<sub>2</sub> Range 14 to 140°F (-10 to 60°C), 5 to 95% RH

 $\pm 3\%$  of reading or 50 ppm  ${\rm CO_2}^2$ , Accuracy

whichever is greater

 $\pm 1.0$ °F ( $\pm 0.5$ °C)<sup>1</sup>,  $\pm 3$ % RH<sup>3</sup> Resolution 10 ppb4 VOC, 0.1 ppm CO<sub>2</sub><sup>2</sup>, 0.1°F (0.1°C), 0.1% RH

## Model 987 High Concentration (ppm) VOC,

Temperature, CO<sub>2</sub>, and Humidity

Range 1 to 2,000 ppm VOC, 0 to 5,000 ppm CO<sub>2</sub>

14 to 140°F (-10 to 60°C), 5 to 95% RH

Accuracy ±3% of reading or 50 ppm CO<sub>2</sub><sup>2</sup>,

whichever is greater  $\pm 1.0^{\circ}F$  ( $\pm 0.5^{\circ}C$ )<sup>1</sup>,

±3% RH3

Resolution 1 ppm<sup>4</sup> VOC, 0.1 ppm CO<sub>2</sub>, 0.1°F (0.1°C), 0.1% RH

#### **Probe Dimensions**

Length 7.0 in. (17.8 cm)

(excluding handle)

Base Diameter 0.75 in. (1.9 cm) 1.0 in. (2.54 cm) Tip Diameter

Note: The 984 and 986 probes are designed to measure ppb concentrations of VOCs. The 10 to 20,000 ppb range corresponds to 0.01 to 20 ppm.

<sup>1</sup> Accuracy with instrument case at 77°F (25°C), add uncertainty of 0.05°F/°F (0.05°C/°C) for change in instrument temperature.

<sup>2</sup> Accuracy with probe at 77°F (25°C). Add uncertainty of ±0.2%/°F (±0.36%/°C)

away from calibrated temperature

<sup>3</sup> 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. 4 When response factor is set to 1.00.

Specifications are subject to change without notice.

TSI, the TSI logo and Velocicalc are registered trademarks, and Airflow, Q-Trak and TrakPro are trademarks of TSI Incorporated.