

# IAQ-CALC™ INDOOR AIR QUALITY METERS MODEL 7515, 7525, & 7545

TSI IAQ-Calc™ Meters are outstanding instruments for investigating and monitoring indoor air quality (IAQ). Model 7515 is a cost-effective meter for carbon dioxide (CO<sub>2</sub>) measurements. Models 7525 and 7545 simultaneously measure and data log multiple parameters. Model 7525 measures CO<sub>2</sub>, temperature, humidity, and calculates dew point, wet bulb temperature, and percentage outside air. Model 7545 adds detection of carbon monoxide (CO).



## Applications

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

## Features and Benefits - All Models

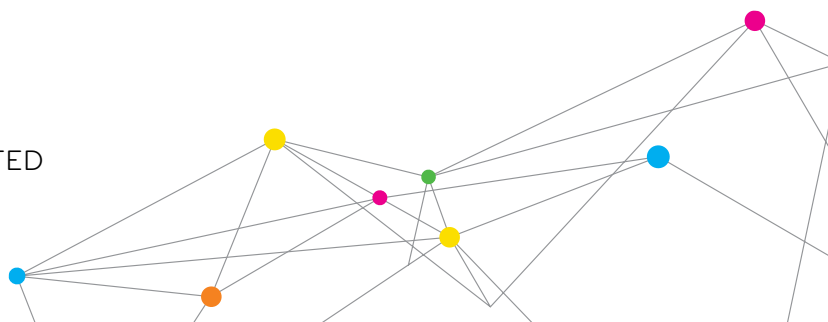
- + Low-drift NDIR CO<sub>2</sub> sensor for stable, accurate readings
- + Sampling function records multiple point measurements
- + Ergonomic, overmolded case design

## Models 7525 and 7545

- + Temperature and relative humidity measurements help determine thermal comfort
- + Calculates percentage outside air from either CO<sub>2</sub> or temperature
- + Directly calculates dew point and wet bulb temperatures
- + Electrochemical sensor measures CO (Model 7545)
- + Displays up to three parameters
- + TSI LogDat2™ software permits easy transfer of data to a computer
- + Data can be reviewed on-screen, or downloaded to a computer for easy report generation
- + Statistics function displays average, maximum and minimum values, and the number of recorded samples



UNDERSTANDING, ACCELERATED



# SPECIFICATIONS

## IAQ-CALC™ INDOOR AIR QUALITY METERS MODELS 7515, 7525 & 7545

### CO<sub>2</sub>

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

### Temperature (Models 7525 and 7545)

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

### Relative Humidity (Models 7525 and 7545)

Sensor Type	Thin-film capacitive
Range	5% to 95% RH
Accuracy <sup>2</sup>	±3.0% RH
Resolution	0.1% RH
Response Time	20 seconds (for 63% of final value)

### Percentage Outside Air (Models 7525 and 7545)

Range	0 to 100%
Resolution	0.1%

### CO (Model 7545 only)

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 seconds to 90% step change

### Operating Temperature

5 to 45°C (40 to 113°F)

### Storage Temperature

-20 to 60°C (-4 to 140°F)

### Logging Capability (Models 7525 and 7545)

Ranges	Model 7525 logs up to 30,300 data points with key (3) measured parameters enabled Model 7545 logs up to 26,900 data points with key (4) measured parameters enabled
Time Constant	1 sec, 5 sec, 10 sec, 20 sec, 30 sec (user selectable)
Log Intervals	1 second up to 1 hour (user selectable)

### Meter Dimensions (all models)

8.4 cm x 17.8 cm x 4.4 cm (3.3 in. x 7.0 in. x 1.8 in.)

### Probe Dimensions (Model 7515)

Length	7.0 cm (2.75 in.)
Diameter	1.9 cm (0.75 in.)

### Probe Dimensions (Models 7525 and 7545)

Length	17.8 cm (7.0 in.)
Diameter	1.9 cm (0.75 in.)

### Weight (with batteries)

0.27 kg (0.6 lbs)

### Power Requirements

Model 7515	Four AA-size batteries
Models 7525 and 7545	Four AA-size batteries or AC adapter

	7515	7525	7545
CO <sub>2</sub>	+	+	+
CO			+
Temperature		+	+
Humidity		+	+
Percentage outside air		+	+
Dew point		+	+
Wet bulb temperature		+	+
Data logging/downloading		+	+
Statistics	+	+	+
Review data		+	+
Certificate of Calibration	+	+	+

<sup>1</sup> Accuracy with probe at 25°C (77°F). Add uncertainty of ±0.36%/°C (±0.2%/°F) away from calibrated temperature.

<sup>2</sup> Accuracy with probe at 25°C (77°F). Add uncertainty of ±0.2% RH/°C (±0.1% RH/°F) away from calibrated temperature.

Specifications are subject to change without notice.

TSI and the TSI logo are registered trademarks, and IAQ-Calc Indoor Air Quality Meters and LogDat2 are trademarks of TSI Incorporated.



UNDERSTANDING, ACCELERATED

TSI Incorporated - Visit our website [www.tsi.com](http://www.tsi.com) for more information.

<b>USA</b>	<b>Tel:</b> +1 800 874 2811	<b>India</b>	<b>Tel:</b> +91 80 67877200
<b>UK</b>	<b>Tel:</b> +44 149 4 459200	<b>China</b>	<b>Tel:</b> +86 10 8251 6588
<b>France</b>	<b>Tel:</b> +33 4 91 11 87 64	<b>Singapore</b>	<b>Tel:</b> +65 6595 6388
<b>Germany</b>	<b>Tel:</b> +49 241 523030		

**We represent this supplier.  
For more information contact  
Observator Instruments:**

**T: +31 (0)180 463411  
E: [info@observator.com](mailto:info@observator.com)**

Rietdekkerstraat 6  
2984 BM Ridderkerk  
The Netherlands

#### **Welcome to the world of Observator**

Since 1924 Observator has evolved to be a trend-setting developer and supplier in a wide variety of industries. Originating from the Netherlands, Observator has grown into an internationally

oriented company with a worldwide distribution network and offices in Australia, Germany, the Netherlands, Singapore and the United Kingdom.

[www.observator.com](http://www.observator.com)