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 CO₂ 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 CO₂ 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

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 (CO₂) measurements. Models 7525 and 7545 simultaneously measure and data log multiple parameters. Model 7525 measures CO₂, temperature, humidity, and calculates dew point, wet bulb temperature, and percentage outside air. Model 7545 adds detection of carbon monoxide (CO).
CO₂
Sensor Type: Dual-wavelength NDIR (non-dispersive infrared)
Range: 0 to 5,000 ppm
Accuracy: ±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: 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 (Models 7525 and 7545)
Sensor Type: Thin-film capacitive
Range: 5% to 95% RH
Accuracy: ±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
40 to 113°F (5 to 45°C)

Storage Temperature
-4 to 140°F (-20 to 60°C)

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

Probe Dimensions (Model 7515)
Length: 2.75 in. (7.0 cm)
Diameter: 0.75 in. (1.9 cm)

Probe Dimensions (Models 7525 and 7545)
Length: 7.0 in. (17.8 cm)
Diameter: 0.75 in. (1.9 cm)

Weight (with batteries)
0.6 lbs (0.27 kg)

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

Specifications
- Accuracy with probe at 77°F (25°C). Add uncertainty of ±0.2%/°F (±0.36%/°C) away from calibrated temperature.
- Accuracy with probe at 77°F (25°C). Add uncertainty of ±0.1% RH/°F (±0.2% RH/°C) 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.

TSI Incorporated - Visit our website www.tsi.com for more information.