



Test Products International, Inc.

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TPI 1001 Instruction Manual

Introduction

Thank you for purchasing TPI products. The TPI 1001 is an indoor air quality monitor designed to measure indoor carbon dioxide (CO₂) levels, temperature, humidity, and volatile organic compounds (VOC) such as formaldehyde and toluene.

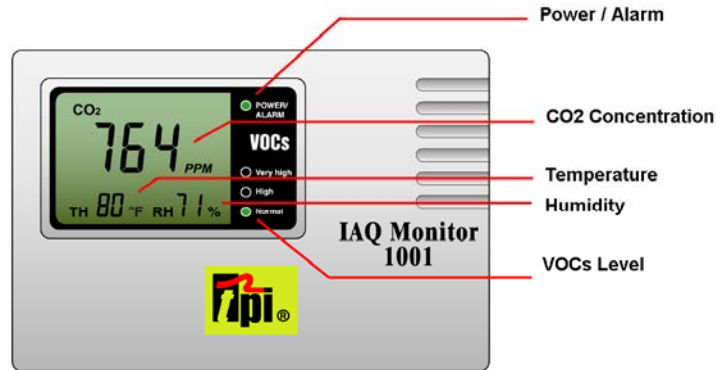
General Guidelines**ALWAYS**

- Position the TPI 1001 so it is easy to see the display.
- Use only the included power adapter.

NEVER

- Cover the sensor area.

Instrument
Overview



WARNING! If the red VOC indicator light illuminates immediately ventilate the area.

1. Step-by-Step Procedures

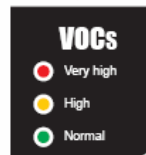
- a. Connect the power supply adapter to the TPI 1001.
- b. Connect the power supply to an appropriate wall outlet. The green power light will illuminate and the display will activate.
- c. Allow the TPI 1001 to warm up. This will take approximately one minute.
- d. The display will show the carbon dioxide level (CO₂), temperature, and humidity of the area being monitored. The VOC level is indicated by a series of LED's.

Display



LED

Red LED : CO₂ is over 1,000 ppm
Green LED : CO₂ level is normal



VOCs level indication

Red LED : immediate ventilation is required
Yellow LED : ventilation is required
Green LED : normal

When the meter is on, the LED display will be on in red, yellow, green within 2 min.

SPECIFICATIONS

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CO₂ sensor	
Measurement Range	100 ppm - 5000 ppm
Sensitivity	±20ppm ±1%
Accuracy	±20ppm ±5%
Sensor type	NDIR (Non dispersive infrared)
Response time	=> T95 within 150 seconds of gas reaching sensor (95% of 0~1800ppm)
Warm-up time	less than 1 min

General	
Power supply	1.2VDC
Power consumption	40mA
Operating temperature	0 - 50°C
Operating humidity	0 - 95%
Storage temperature	-20°C - +50°C

VOCs sensors	
Sensor type	Semi-Conductor
Gases detected	Formaldehyde, Toluene, cigarette smoke, etc.
LEVEL indications	Red at more than 5 ppm (danger) Yellow at more than 3 ppm (caution) normally Green at below 2 ppm ** concentration might change according to temperature and humidity. So this indication should be reference of air pollution.

Temperature

Range -20°C – +60°C

Accuracy $\pm 1^\circ\text{C}$ **Humidity**

Range 0% – 100%

Accuracy $\pm 1\%$ **Dimensions**

Size 15 × 20 × 10cm

Weight 200 g