

# TES

Reliable in Quality

## TES-5321/5322 Air Quality Monitor

- Identify fine particulate (PM2.5) rating
- Temperature and Humidity measurements
- Health index (0 ~ 9) detection and alarm
- PM2.5 and VOCs time weighted average reading
- 3-color LED indication for air quality (Good, Moderate & Poor)







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# TES-5321/5322 Air Quality Monitor

## FEATURES

- Fine particulate matter (PM2.5) measurement
- Mix gases (VOCs-Volatile organic compounds) measurement  
High sensitivity to H<sub>2</sub>, C<sub>2</sub>H<sub>5</sub>OH, C<sub>4</sub>H<sub>10</sub>, CO and CH<sub>4</sub>. (5322)
- Temperature and Humidity measurements
- Health index (0 ~ 9) detection and alarm
- PM2.5 and VOCs time weighted average reading
- Data hold and MAX/MIN with time stamp function
- Three-color LED indication air quality at good/moderate/poor
- Preset warning point of buzzer alarm, LED and alarm output
- Manual data memory and read function
- Auto data logger function (5322)
- USB Interface (5322)

| Air Pollution Regulation   |                            | WHO  |      |      |     | European Union | USA           |            | Canada | Australia | Japan | South Korea | Hong Kong | China  |        | Thailand | Taiwan |
|----------------------------|----------------------------|------|------|------|-----|----------------|---------------|------------|--------|-----------|-------|-------------|-----------|--------|--------|----------|--------|
|                            |                            | IT-1 | IT-2 | IT-3 | AQG |                | United States | California |        |           |       |             |           | Class1 | Class2 |          |        |
| PM2.5<br>µg/m <sup>3</sup> | Yearly average             | 35   | 25   | 15   | 10  | 25             | 12            | 12         | -      | 8         | 15    | -           | 35        | 15     | 35     | 25       | 15     |
|                            | Daily average<br>(24-hour) | 75   | 50   | 37.5 | 25  | -              | 35            | -          | 30     | 25        | 35    | -           | 75        | 35     | 75     | 50       | 35     |

## SPECIFICATIONS

|                                    |  |
|------------------------------------|--|
| Measurement Range                  | PM2.5 : 0 to 500 µg/m <sup>3</sup><br>VOCs : 1 to 50ppm<br>Humidity : 1% to 99%R.H.<br>Temperature : -20°C to +60°C (-4 °F to +140 °F )  |
| Resolution                         | 0.1 µg/m <sup>3</sup> , 1ppm, 0.1% R.H., 0.1 °C , 0.1 °F   |
| Accuracy                           | PM2.5 : ±10% of reading±10 µg<br>VOCs : ±10% of reading±1ppm<br>Temperature : ±0.8°C , ±1.5 °F<br>Humidity : ±3%RH (at 25°C , 30 to 80% RH).<br>±5%RH (at 25°C , 0 to 20% RH and 80 to 100% RH). |
| Sensor type                        | PM2.5 : Photodiode sensor.<br>VOCs : Mix gases sensor<br>Humidity : Precision capacitance sensor<br>Temperature : Thermistor sensor  |
| Response time                      | Humidity : 45%R.H. to 95% R.H. <= 1min<br>95%R.H. to 45%R.H. <= 3min<br>Temperature : 10°C /2 sec.   |
| Sampling rate                      | 1 sample/second.   |
| Data Memory Capacity               | 39 sets. (Direct reading from LCD display)   |
| Data Logger Capacity               | microSD CARD 4GB   |
| Operating temperature and humidity | 0°C to 60°C , below 95% R.H.   |
| Storage temperature and humidity   | -10°C to 60°C , below 70% R.H.   |
| Power supply                       | Four 1.5V LR-6/AA size batteries, AC adapter   |
| Battery life                       | Approx. 8 hour   |
| Dimensions                         | 165mm(L)×93mm(W)×75mm(T) , (6.5"L×3.7"W×3"T)   |
| Weight                             | Approx. 380g (13.4oz)  |
| Accessories                        | Instruction manual, Battery, CD software, Micro-USB cable, Carrying case, AC adaptor DC6V.   |



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