

# INDOOR AIR QUALITY(IAQ) MONITOR



## PM2.5, CO2, HUMIDITY, TEMP. MONITOR/DATALOGGER 7710

- Large LED displays PM2.5, Health index, CO2, humidity and temperature.
- 12000 times auto logging. USB2.0 plug and play. No need to operate through specific software.
- Wall mount display with 3-color light bar to provide PM2.5/CO2 hazardous level indicator from far distance
- High accuracy laser optical PM2.5 sensor
- NDIR (non-dispersive infrared) waveguide CO2 tech
- CO2 automatic background calibration (called ABC) for long time drift compensation



Metric/Imperial



Auto Logging



EXCEL



LED Display



USB 2.0



USB TypeC



Buzzer Alarm



LED Alarm



Best helper to increase your rating while applying **LEED** green building certificate



Table 2. Points for Continuous Indoor Air Monitoring

| Parameter            | Data requirement      | Minimum limit        | IAQ                  | Enhanced IAQ limit   | Points*                                       |
|----------------------|-----------------------|----------------------|----------------------|----------------------|---|
| Carbon dioxide (CO2) | 95th percentile value | 1000 ppm             | 800 ppm              | 800 ppm              | 3 (minimum IAQ limit), 4 (enhanced IAQ limit) |
| PM2.5                | Daily average         | 15 ug/m <sup>3</sup> | 12 ug/m <sup>3</sup> | 12 ug/m <sup>3</sup> | 3 (minimum IAQ limit), 4 (enhanced IAQ limit) |

By improving the CO2 and PM2.5 concentration indoor and providing continuous monitoring record, at most 8 points is added to your LEED rating.

The **health index** in this product follows **USA EPA** guidelines

Long term PM2.5 value brings higher impact to human health. The health index here provides you a quick indication to know the average PM2.5 level of past 24 hours.

| Health index level | AQI category                   | Breakpoints (ug/m <sup>3</sup> , 24H average) |
|--------------------|--------------------------------|---|
| 1                  | Good                           | 0.0~12.0                                      |
| 2                  | Moderate                       | 12.1~35.4                                     |
| 3                  | Unhealthy for sensitive groups | 35.5~55.4                                     |
| 4                  | Unhealthy                      | 55.5~150.4                                    |
| 5                  | Very Unhealthy                 | 150.5~250.4                                   |
| 6                  | Hazardous                      | 250.5~350.4                                   |
| 7                  | Hazardous                      | 350.5~500                                     |

### Ordering Code

VZ7710AZ, 7710 PM2.5/CO2 Logger  
VB17729A, 5V USB adaptor with 4 plugs

\*Available for EB project

| Model                        | 7710  |
|------------------------------|---|
| <b>Measuring range</b>       |   |
| PM2.5                        | 0~999 ug/m <sup>3</sup>   |
| CO2                          | 0~9999 ppm,   |
| Temperature                  | -10.0~60.0°C (14~140°F)   |
| Humidity                     | 0.1~99.9% RH  |
| <b>Resolution</b>            | 1ug/m <sup>3</sup> , 1ppm, 0.1°C/°F, 0.1%RH   |
| <b>Accuracy</b>              |   |
| PM2.5                        | 0-100: +/-10 ug/m <sup>3</sup> ; 101-999: +/-10% rdg. ±40ppm±3% of reading (400~2000ppm). |
| CO2                          | Other range is 10% of reading   |
| Temperature                  | +0.6°C/+0.9°F   |
| Humidity                     | ±5%RH (at 25°C, 10~90%RH); ±7%RH (at 25°C, other range)                                   |
| <b>Warm-up time</b>          | 10 seconds  |
| <b>Response time</b>         |   |
| PM2.5                        | <30 seconds(90% step change)  |
| CO2                          | <30 seconds (63% step change)   |
| Tair                         | <2 mins (90% step change)   |
| Humidity                     | <20 minutes (90% step change)   |
| <b>Auto Logging</b>          | 12000 times records   |
| <b>Operating condition</b>   | 0~50°C, 0~95% RH (avoid condensation)   |
| <b>Storage condition</b>     | -20~ 50°C, 0~95%RH(avoid condensation)  |
| <b>Power supply</b>          | 5VDC USB type C port  |
| <b>Power consumption</b>     | <500mA  |
| <b>Meter size (LxWxH,mm)</b> | 257 x 168 x 45.5 mm (L x W x T)   |
| <b>IP rating</b>             | IP20  |
| <b>Weight</b>                | 610g  |
| <b>Standard package</b>      | Meter, manual, Type C cable, Hanging & filtering accessories.                             |
| <b>Optional accessory</b>    | 100~240V to 5V@0.6A adaptor with 4 plugs (US.EU.UK. AU)                                   |

**Areas of application:** Widely used in the office building, school, exhibition hall, shopping mall, meeting room, fitness center, restaurant and other public places where **energy bill**, personal **comfort** and **healthy** are important.

