

INDOOR AIR QUALITY MONITOR



CO₂, HUMIDITY, TEMP., TREND MONITOR 7727

- Big LCD displays CO₂ value, humidity, temperature, CO₂ trend (with good, normal, poor indicator) and hour-minute clock.
- Logged CO₂ data shown as trend, no need to download.
- Touch panel to program the setting
- NDIR (non-dispersive infrared) CO₂ technology
- 3-color backlight to indicate status of indoor air quality
- Eco mode to turn backlight dim during night time
- 7-color backlight as nightlight to fit home/office deco.



CO₂ LEVELS AND GUIDELINES

Non-Enforced Reference levels

NIOSH recommendations

250-350 ppm:

Normal outdoor ambient concentrations

600 ppm:

Minimal air quality complaints

600-1000 ppm:

Less clearly interpreted

1000 ppm:

Indicates inadequate ventilation; complaints such as headaches, fatigue and eye/throat irritation will be more widespread. 1000 ppm should be used as an upper limit for indoor levels.

EPA Taiwan: 600ppm and 1000ppm

Type 1

indoor areas such as department stores, theaters, restaurants, libraries, the acceptable CO₂ concentration of 8 hours average is 1000ppm.

Type 2

indoor areas with special requirements of good air quality such as schools, hospitals, day care centers, the suggested CO₂ level is 600ppm.

Regulatory exposure limit

ASHRAE Standard 62-1989: 1000ppm

CO₂ concentration in occupied building should not exceed 1000ppm.

Building bulletin 101 (BB101): 1500ppm

UK standards for schools say that CO₂ at averaged over the whole day (i.e. 9am to 3.30pm) should not exceed 1500ppm.

OSHA: 5000ppm

Time weighted average over five 8-hour work days should not exceed 5000ppm.

Germany, Japan, Australia, UK...: 5000ppm

8 hours weighted average in occupational exposure limit is 5000ppm.

Ordering Code

VZ7727NL, 7727 compact size CO₂ monitor
VB17729A, 5V USB adaptor with 4 plugs

| Model | 7727 |
|------------------------|---|
| Measuring range | |
| CO ₂ | 200~5000 ppm, |
| Temperature | 0.0~50.0°C (32~122°F) |
| Humidity | 5~95% RH |
| Resolution | |
| | 1ppm, 0.1°C/°F, 1%RH |
| Accuracy | |
| CO ₂ | ±50ppm±5% of reading (200~3000ppm) 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) |
| Warm-up time | 10 seconds |
| Response time | |
| CO ₂ | <2 mins (63% step change) |
| Tair | <2 mins (90% step change) |
| Humidity | <20 minutes (90% step change) |
| Operating condition | 0~50°C, 0~95% RH (avoid condensation) |
| Storage condition | -20~50°C, 0~95%RH (avoid condensation) |
| Power supply | 5VDC USB type C port |
| Power consumption | <500mA |
| Buzzer | ~70dB at 10cm distance |
| Meter/LCD size | 108x67x30 mm / 60 x 37.5 mm |
| Weight | 90g |
| Standard package | Meter, manual, USB type C cable, paper box |
| Optional accessory | 100~240V to 5V@0.6A adaptor with 4 plugs (US.EU.UK. AU) |

4 Different Backlight settings to fulfill all your needs

AUTO mode

The LCD backlight auto switches between green, yellow and red according to CO₂ concentration.

AL mode

The LCD backlight only turns on and in red while CO₂ is higher than threshold

ON mode

The backlight is always ON and 7 colors can be picked up from setting mode.

OFF mode

Backlight is always OFF.

