# **INDOOR AIR QUALITY MONITOR**



## CO<sub>2</sub> 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 CO<sub>2</sub> concentration of 8 hours avarge is 1000ppm.

#### Type 2

indoor areas with special requirements of good air quality such as schools, hospitals, day care centers, the suggested CO<sub>2</sub> level is 600ppm.

## Regulatory exposure limit

### ASHRAE Standard 62-1989: 1000ppm

 $\text{CO}_2$  concentration in occupied building should not exceed 1000ppm.

#### Building bulletin 101 (BB101): 1500ppm

UK standards for schools say that  $CO_2$  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 CO<sub>2</sub> monitor VB17729A, 5V USB adaptor with 4 plugs

# CO<sub>2</sub>, HUMIDITY, TEMP., TREND MONITOR 7727

- ■Big LCD displays CO<sub>2</sub> value, humidity, temperature , CO<sub>2</sub> trend (with good, normal, poor indicator) and hour-minute clock.
- ■Logged CO<sub>2</sub> data shown as trend, no need to download.
- ■Touch panel to program the setting
- ■NDIR (non-dispersive infrared) CO<sub>2</sub> 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.



Model	7727
Measuring range	
CO2	200~5000 ppm,
Temperature	0.0~50.0 <sup>o</sup> C (32~122 <sup>o</sup> F)
Humidity	5~95% RH
Resolution	1ppm , 0.1 <sup>o</sup> C/ <sup>o</sup> F, 1%RH
Accuracy	
CO2	<u>+</u> 50ppm <u>+</u> 5% of reading( 200~3000ppm)
Temperature	Other range is 10% of reading ±0.6 <sup>0</sup> C/±0.9 <sup>0</sup> F
·	<u>+</u> 5%RH (at 25 <sup>o</sup> C, 10~90%RH) ;
Humidity	±7%RH ( at 25°C , other range )
Warm-up time	10 seconds
Response time	
CO2	<2 mins (63% step change)
Tair	<2 mins (90% step change)
Humidity	<20 minutes ( 90% step change)
Operating condition	0~50 <sup>O</sup> C , 0~95% RH (avoid condensation)
Storage condition	-20~ 50 <sup>0</sup> 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.

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# OFF mode

OFF mode Backlight is always OFF.