

ZG1683RU 3 IN 1 CO2 Monitor (CO2+Temp.+RH) Operating Instructions

Product Overview

Thank you for selecting ZG1683RU desktop CO2 monitor, ZG1683RU CO2 monitor is smart, compact and easy-to-use. In addition to measuring the CO2 concentration, ZG1683RU can also measure the ambient temperature and the relative humidity (CO2+Temp. +RH). This product is developed to detect the presence of CO2 in ambient air and help people to take care of Indoor Air Quality. ZG1683RU can be widely used in the office building, school, exhibition hall, shopping mall, meeting room, fitness center, restaurant and other public places where personal comfort, healthy is important.

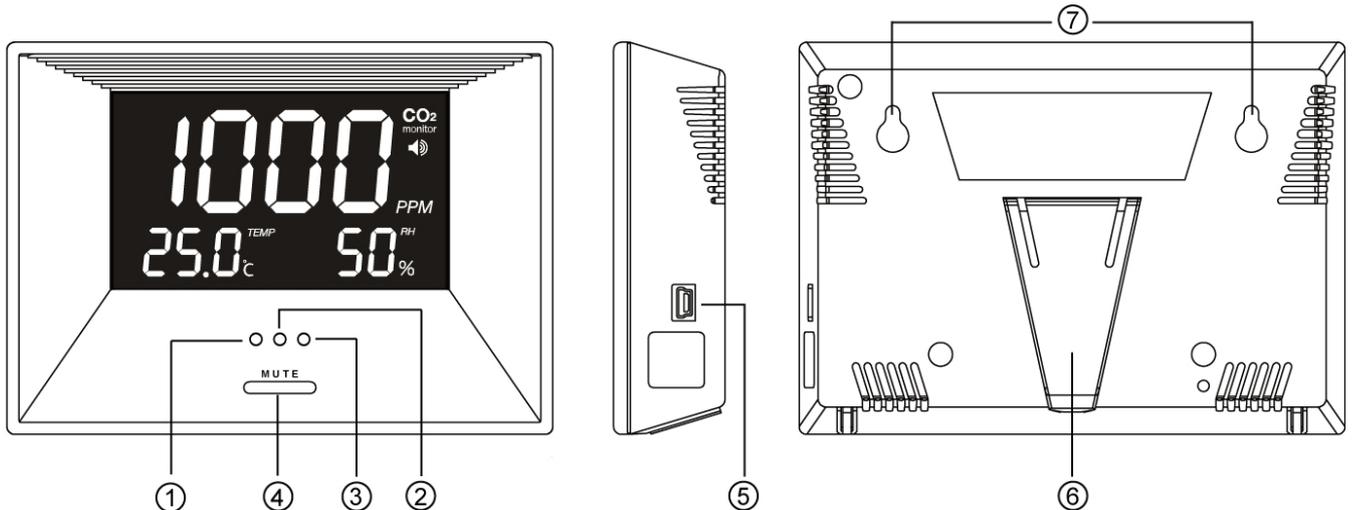
Features:

- ☑ Three different LED display shows the current Indoor Air Quality
- ☑ Press MUTE button for alarm on/off.
- ☑ Built in the LCD Backlight for easy reading in the dark.

Warnings:

- ☑ Please take off the AC power adapter and store it well when this CO2 monitor left idle for long.
- ☑ This CO2 monitor is for home use, not suitable for certifying the test results.
- ☑ If use this CO2 monitor for testing, ZG1683RU does not guarantee the test results.

1. Green LED Display (<800ppm)
2. Yellow LED Display (800-1200ppm)
3. Red LED Display (>1200ppm)
4. Mute Button
5. Power Inlet
6. Housing Stand
7. Screw Position



⚠EMC/RFI

Readings may be affected if the unit is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.

Note: Under the electromagnetic field of 3V/m, the reading will not meet the specification.

Warm-Up Time: 2 MIN.

The diagram shows the warm-up process. The LCD displays '8888' with a 1-second blank cycle. The MUTE button is disabled during warm-up. The device shows the CO2 reading after warm-up.

1. 2 min. warm-up time when first time power.
2. The LCD shows 4 bars with 1sec blank cycle during warm-up
3. The MUTE button is disabled during warm-up
4. The device shows the CO2 reading after warm-up

Using the MUTE function:

The diagram shows the MUTE function being used to select buzzer on/off. Pressing the MUTE button when the CO2 concentration exceeds the alarm level (>1200 ppm) will result in a buzzer.

Note: The device setting with alarm is buzzer on when power on first time, user can set the alarm on/off under MUTE function.

Connect to PC with data log function:

1. The ZG1683RU connect with PC first.
2. <http://www.zyaura.com/products/ZG1683R.asp> "Connect to PC with data log function (ZG1683RU)" for the software (ZyAura_USB_HUB_PC_software.rar) and installation processes.

Connect to PC with data log function (ZG1683RU)

Please download ZyAura USB HUB PC software from http://www.zyaura.com/support/support_software.htm

[Download](#)

For Vista · Windows 7 and above, please follow the settings <more>

- 1.The ZG1683RU connect with PC and use ZyAura USB HUB PC software to record data from ZG1683RU
Please download ZyAura USB HUB PC software from http://www.zyaura.com/support/support_software.htm
- 2.You will get ZG. eye file and then please change the "eye" into "exe" to download.

ZG.ini	445	242
ZG. eye	876,032	730,880
ZG Simplified Chinese manual.pdf	384,691	311,257
ZG English manual.pdf	57,168	43,668
ZG Chinese manual.pdf	387,299	315,173
LowMsg4.jpg	78,705	59,470
LowMsg3.jpg	35,785	32,677
LowMsg2.jpg	62,326	42,517
LowMsg1.jpg	40,301	22,855
HighMsg4.jpg	84,710	65,998
HighMsg3.jpg	88,860	68,955
HighMsg2.jpg	67,888	49,486
HighMsg1.jpg	48,984	30,461
HIDApi.dll	72,704	64,355
Demo.gif	9,524	9,286

Safety Instructions

Warning: Your safety is very important to us .To ensure to use the product correctly and safely, we would like to draw your attention to read the warning and entire User Manual before using the product. These are important safety information and should be observed at all times.

1. Please handle the devices lightly, do not subject the product to impact or shock.
2. Do not immerse the product in water. Water can cause electric shock, fire or malfunction which may result in damage.
3. Do not keep the product under the hot and moisture environment. Keep the product away from the heat source or near water.
4. Please use only the included power adaptor. Improper power adaptor or power sources can cause serious damage to the product, or result in injury or death to the user.

Caring for product

To ensure you receive the maximum benefit from using this product, please observe the follow guidelines.

1. Cleaning— Disconnect the power before clean. Use a damp cloth, do not use the liquid cleaning agent, such as benzene, thinner or aerosols.
2. Repair----Do not attempt to repair the product or modify the circuitry by yourself. Please contact with the local dealer or a qualified repairman if the product needs servicing.
3. Air circulation---The vents allow the air circulation liquid for measurement of the CO2 concentration and the ventilation should not be blocked.

Specifications

Method – Dual Beam NDIR

Display - LCD Independent CO2, RH and Temperature readings

Sample Method - Diffusion or flow through (50 ~200 ml/min)

CO2 & Temperature Specification:

CO2 Specification:	
Measurement Range	0-3,000 ppm display
Display Resolution	1ppm at 0~1,000ppm; 5ppm at 1,001~2,000ppm; 10ppm at 2,001~3,000ppm
Accuracy	Under 25°C: ±80 ppm or ±5% of reading (≤ 2000ppm); ±7% reading (>2000ppm)
Repeatability	±20 ppm @ 400ppm
Temperature Dependence	Typ. ±0.2% of reading per °C or ±2 ppm per °C, whichever is greater, referenced to 25°C
Response Time	About 2min for 63% of step change
Warm-Up Time	2 min. at 22°C
Zone LED Display	Green: <800ppm; Yellow: 800~1200ppm; Red: >1200ppm
Temperature Specification:	
Temperature Range	0°C to 50°C (32°F to 122°F) display
Display Resolution	0.1°C (0.1°F)
Display Options	°C/°F
Accuracy	±1°C(±2°F) When the fan blows to the device directly, the accuracy of temperature is + / -1.5 degC
Response Time	20-30 minutes (case must equalize with environment)
RH Specification:	
Measurement Range	20%-90% RH
Display Resolution	1%RH
Accuracy:	±5%RH@23°C
Response time:	<5 min for 63% of step change
Operating Conditions:	
Operating Temperature	0°C to 50°C (32°F to 122°F)
Humidity Range	0 - 95% RH non-condensing
Storage Conditions:	
Storage Temperature	-20°C to 60°C(-4°F to 140°F)

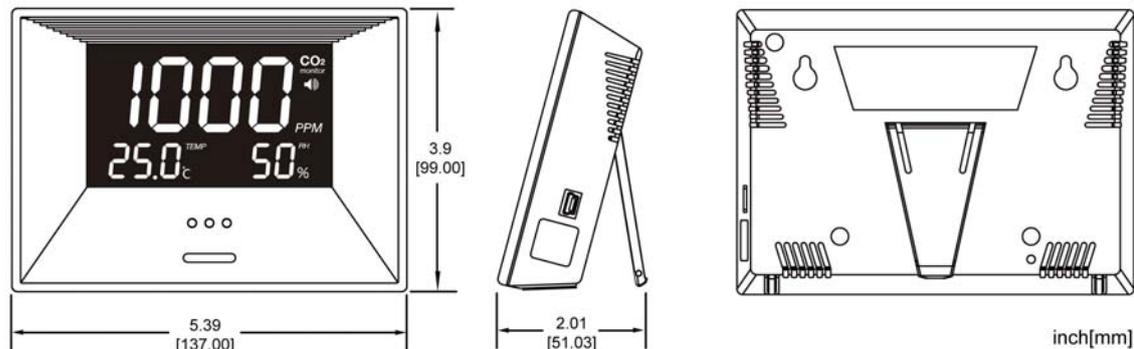
Power Supply:

Power Supply	USB or 5 VDC from external AC/DC adapter which is included in package (Use specified AC adapter only)
DC Output voltage	5 VDC
AC Input voltage & Frequency	100 ~ 240 VAC, 0.2A 50 / 60 Hz

Communication interface:

Version	USB 2.0 low speed function
OS	Windows XP ,Windows7

Dimension



Fault Codes & Troubleshooting Guide

This section includes a list of Frequently Asked Questions for problems you may encounter with the ZG1683RU CO2 Monitor.

Fault Icon	Description of the fault	Suggested Actions
「Err3」	The ambient temperature has exceeded the operating temperature range 0°C to 50°C (32°F to 122°F)	This error will clear when the temperature returns to the range between 0°C to 50°C (32°F to 122°F).
「Err5」 「Err6」	EEPROM System Problem	Please reconnect AC adapter to ZG1683RU CO2 Monitor. If the "Err5, Err6" still appears, please contact the Service Department for further assistance.



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