# Monitor CO<sub>2</sub> to ensure Indoor Air Quality

## CO2 and Temperature Monitor

- Cost effective CO<sub>2</sub> monitors made with IR-SOC technology
- Dual Beam NDIR technology to improve the long term stability
- The Alarm mode will sound at 1000 PPM or adjust the Alarm level
- Measure CO2, temperature and the relative humidity (ZG106R only)
- Several Modes for adjusting the setting parameters
- Desktop / Portable CO2 Monitor



ZG106 SERIES



Monitor the invisible

ZG106 is a portable, accurate handheld CO2 monitor. In addition to measuring the CO2 concentration, this device can also measure CO2, temperature and the relative humidity (ZG106R only). It uses Dual Beam NDIR technology to improve the long term stability.

### **Specifications**

Dual Beam NDIR(Non-Dispersive-Infrared) technology used to measure CO2 concentration

Independent CO<sub>2</sub>, Temperature readings and RH(ZG106R only)

Calculates and Displays Ventilation Rates

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

#### Performance - CO2

Measurement Range	ZG106/ ZG106R 0~3,000ppm	<b>ZG106A-M</b> 0~10,000ppm	
Resolution	1ppmat0~1,000ppm 5ppmat1,001~2,000ppm 10ppmat2,001~3,000ppm	1ppmat0~1,000ppm 5ppmat1,001~2,000ppm 10ppmat2,001~4,000ppm 20ppmat4,001~6,000ppm 40ppmat6,001~10,000ppm	
Accuracy	ZG106R: 0~2,000ppm: ±70 ppm or ±5% of reading, whichever is greater; over 2000ppm: ±7% ZG106/ ZG106A~M: ±50 ppm or ±5% of reading		
Repeatability	±20 ppm @ 400ppm		
Temperature Dependence	ZG106R: ±0.2 % of reading per °C or ±2 ppm per °C, whichever is greater, referenced to 25°C ZG106/ZG106A~M: ±0.1 % of reading per °C or ±2 ppm per °C, whichever is greater, referenced to 25°C		
Pressure Dependence	0.13% of reading per mm Hg (Corrected via user input for altitude)		
Response Time	About 2min for 63% of step change		
Warm-Up Time	<60 seconds at 22°C		

#### General Operating Conditions

Operating Temperature 0-50°C (32-122°F) 0-95%RH, non-condensing

Storage Temperature -20 to 60°C (-4 to 140°F)

## ZyAura Monitor the invisible

Temperature Specification

Temperature Range	0°C to 50°C (32°F to 122°F) display
<b>Display Resolution</b>	0.1°C (0.1°F)
<b>Display Options</b>	°C/°F
Accuracy	$\pm 1^\circ C(\pm 2^\circ F)$ When the fan blows to the device directly, the accuracy of temperature is $\pm 1.5$ degC
<b>Response</b> Time	20-30 minutes (case must equalize with environment)

#### Outputs (Except ZG106R)

OC: Normally Low,100mA max.@24VDC.Adjustable set point, factory setting is 1000ppm, hysteresis is 50ppm

#### Power Supply

Battery type Alkaline, AA\* 4 (80 hours)

External ZG106R: 100 ~ 240 VAC 50 / 60 Hz 6 VDC from external AC/DC adapter which is included in package (Use specified AC adapter only) ZG106/ZG106A~M: 6 VDC from external AC/DC adapter which is included in package (Use specified AC adapter only)

#### RH Specification (ZG106R only)

Measurement Range	20%~90%
<b>Display Resolution</b>	1%RH
Accuracy	±5%RH@23°C
Response Time	< 5mins for 63% of step change

Specifications are subject to change without notice





(Display Features and Modes)



1. Power Button	8. Function Label
2. Enter Button	9. Gas Entry Hole
3. Down Button	10. Power Inlet
4. Up Button	11. RJ45 Socket
5. Mode Button	12. Housing Stand
6. LCD Display	13. Battery Cover
7. LED Light	14. AA Batteries*4

1F, No.3, Industrial E. 9th Rd., Science-Based Industrial Park, HsinChu, Taiwan 300, TEL:+886-3-6111666 or 5644185 FAX:+886-3-5644170 www.ZyAura.com E-mail:Info@ZyAura.com www.ZyTemp.com E-mail:Info234@ZyTemp.com www.radiantek.com.tw E-mail:MKT@radiantek.com.tw