

# Monitor CO2 / O2 to ensure the Safety of Storage Areas

- Dual Beam NDIR (Non-Dispersive Infrared) technology is used to measure CO2 concentration up to 50,000 ppm (parts per million) and electrochemical technology to measure O2 concentration up to 30%
- With the SEU (Sensor Unit) and RDU (Remote Display Unit), it can connect up to 3 RDU for safety notices
- Large digital LCD display clearly indicates the ambient CO2 > O2(optional) concentration and Temperature
- Relay output can automatically control a fan to ventilate confined spaces
- Audible and Visual Alarm indications
- IP54 Water Proof Protection of SEU (Sensor Unit) except backside when installed on the wall



Breweries / Wineries



Cellars



Beverage Dispensing Areas



Fast Food Outlets



AT-CO2-PB01 is designed to detect the presence of Carbon Dioxide and Oxygen in the ambient air to protect people in confined spaces. High concentrations of CO2 or low concentrations of Oxygen in confined spaces are dangerous, and may lead to health problems ranging from headaches and fatigue to asphyxiation and death. The AT-CO2-PB01 CO2 Monitor is with the audible alarm and visual indication which will activate when the CO2 concentration reaches the pre-set level. Detection of high levels of CO2 will also activate a relay that could be used for a fan to ventilate the confined space and reduce CO2 concentration in the area. The AT-CO2-PB01 CO2 Monitor can be widely used in CO2 storage areas, breweries, wineries, cellars, beverage dispensing areas, and fast food outlets.

# **Specifications**

#### ■ Performance-CO<sub>2</sub>, O<sub>2</sub> Channel

Measurement Range: CO2: 0 - 50,000ppm (5%) display,

Resolution: CO2: 10ppm at 0~10,000ppm;

100ppm at 10,001~50,000ppm,

Accuracy: CO2: ±100ppm or ±5% of reading, whichever is greater

Repeatability: CO2: ±20ppm @ 400ppm

Response Time: CO2: <60 seconds for 90% response to step change

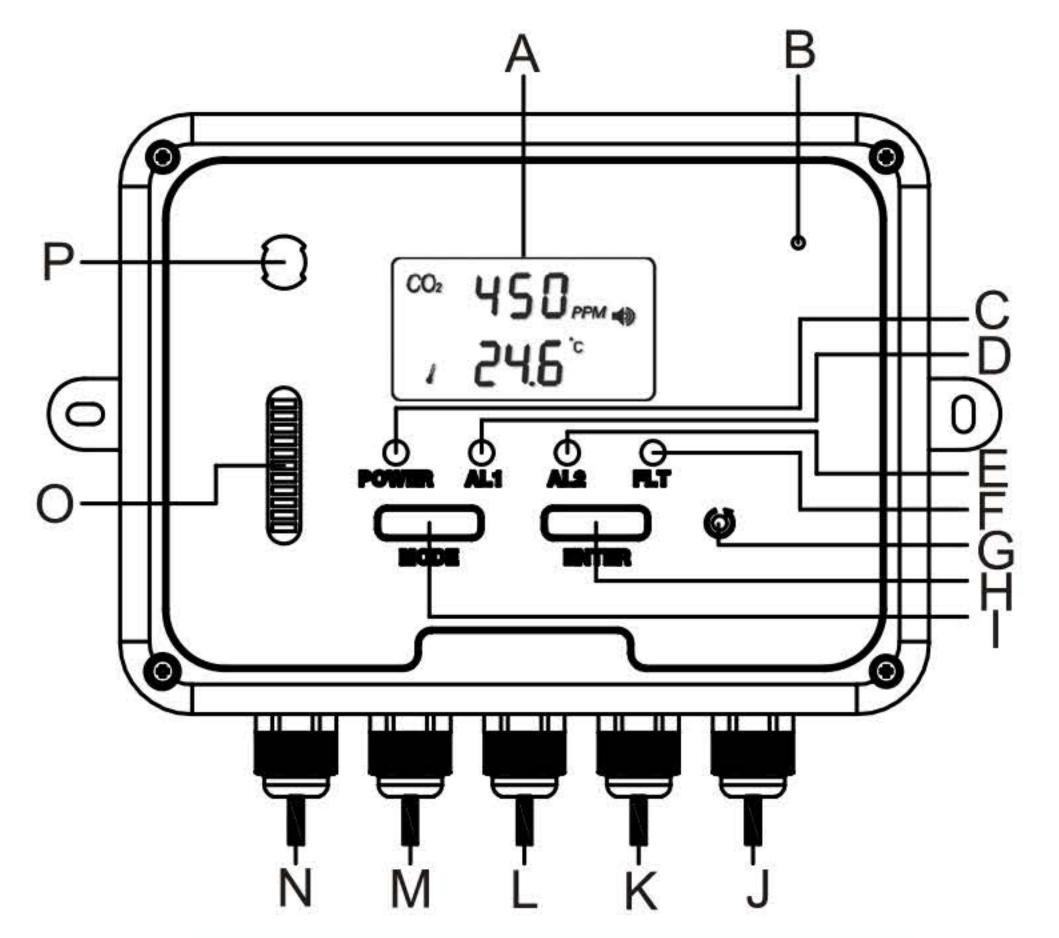
Warm-Up Time: <60 seconds at 22°C

#### General Operating Conditions

**Operation Temperature**: 0~40°C (32~104°F)

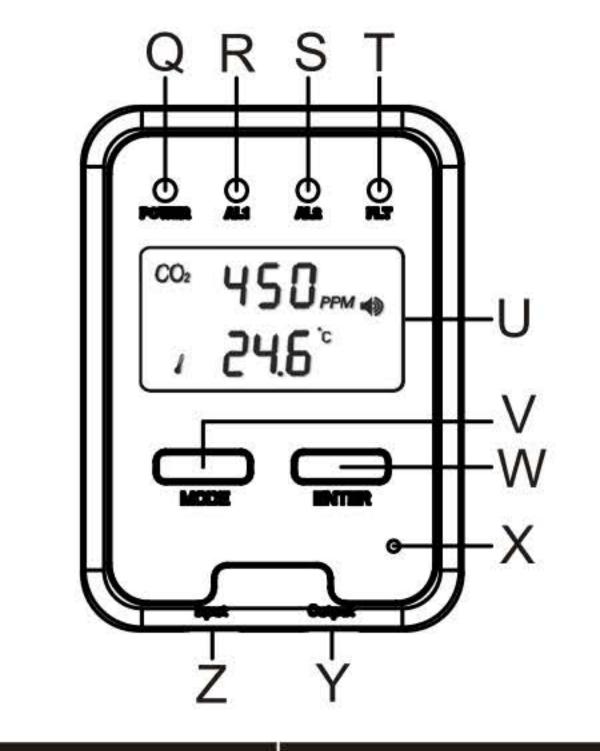
Humidity Range: 0-95%RH, non-condensing

#### SEU (Sensor unit)



A. LCD display	I. Mode Button
B. Buzzer	J. CO2 Relay output (red & white: NO, blue & white: NC)
C. Green LED (Power indication)	K. O2 Relay output (red & white: NO,blue& white: NC)
D. Red 1 LED(AL1)	L. Analog output (red & white:CO2, blue &white: O2)
E. Red 2 LED(AL2)	M. Communication Cable to RDU
F. Yellow LED (Fault indication)	N. Power Supply
G. Reset Button	O. CO2 entry
H. Enter Button	P. O2 entry

#### RDU (Remote Display Unit)



Q. Green LED (Power indication)	V. Mode Button
R. Red 1 LED (AL1)	W. Enter Button
S. Red 2 LED (AL2)	X. Buzzer
T. Yellow LED (Fault Indication)	Y. RJ45 Plug for next RDU (Output
U. LCD display	Z. RJ45 Plug for SEU (Input)

### ■ Temperature Specification

Temperature Range: 0 ~ 50°C (32 ~ 122°F)

Display Resolution: 0.1°C (0.1°F)

Display Options: °C/°F

Accuracy : ±1°C(±2°F) when CO2 concentration is below first

alarm le**vel** 

Response Time : 20-30 minutes (case must equilibrate with environment)

## ■ Power Supply & Relay Output

Relay Outputs: Peak Current<2A@30VDC or 250VAC, SPDT for

CO2/O2

Analog output: Two channel linear current output

 $4\sim20$  mA for O2, RL<150 $\Omega$ ;  $4\sim20$  mA for CO2, RL<150 $\Omega$ .

Power Supply: AC adapter 110/220 VAC

Specifications are subject to change without notice.

