

Model pSENSE-RH
Portable Carbon Dioxide Instrument

New!

PRODUCT DESCRIPTION

Model pSENSE is a very flexible and easy to use hand-held, instrument designed to measure the carbon dioxide concentration, temperature and humidity in surrounding air.

The large illuminated display presents the 3 values simultaneously, as well optional Air/Wet and Bulb temp by selection.

Built-in data output (RS232) makes it simple to log data for longer time. Audible alarm, Max/Min Average as well as TWA and STEL measurements are possible.

The carbon dioxide sensor's gold-plated infra-red waveguide and diffusion membrane filter provides you great reliability, accuracy and long-term stability.



FEATURES

- State-of-the-art non-dispersive infrared (NDIR) technology to measure carbon dioxide gas in parts-per-million (ppm)
- Data output RS232
- Displays the current carbon dioxide temperature and RH% on a large LCD
- Displays TWA (8hours) STEL (15 minutes) Min, Max and average values
- Internal automatic self-diagnostic function
- Audible alarm
- Easy to calibrate

APPLICATIONS

With a battery capacity covering more than 24 hours, the instrument works perfectly for diagnosing ventilation using carbon dioxide as the surrogate ventilation index.

The instrument works perfect for measuring the indoor air quality parameters CO₂, Temp and RH%. Carbon dioxide has been acknowledged as a good indicator that adequate "fresh" outside air is being supplied to the occupants for acceptable indoor air quality. Adequate ventilation reduces temporary sickness, downtime and lost productivity.

The pSENSE is also ideal for measuring carbon dioxide concentration in *incubators, green-houses, mushroom farms, etc.*, where correct levels are essential for the process outcome.



pSENSE Technical specification*

Measurement

Operating Principle.....	Non-dispersive infrared (NDIR) with gold plated optical cell
Gas Sampling Mode.....	Diffusion
Response Time (1/e).....	Approx 30 sec
Measurement Range.....	0-3000 ppm
Extended Range	3001-9999 ppm
Accuracy	±30 ppm ±5% of reading (CO ₂) (0 ~ 3000 ppm)
.....	±0.6 °C/±0.9 °F, ±3 % RH (at +25 °C, 10 ~ 90 %)
.....	others ± 5 % for other RH ranges
Warm up time.....	30 seconds
Response time	about 30 seconds
Alarm sound level.....	80 dB
Operating condition	0° ~+50 °C, 0 ~ 95 % RH (avoid condensation) for CO ₂
Storage condition	-20° ~ +60 °C
Power supply.....	AA type (UM-3) x 4 pcs
Battery life	> 10 hours
Standard packing includes	Meter, manual, batteries and hard carrying case
Optional accessories.....	Salt solution HR33, HR75%, adaptor 9V/100-240VAC,
.....	RS232 software with D-sub connector VZRS232M
Pressure Dependence	+ 1.6 % reading increase per kPa deviation from normal pressure
Calibration	Manual calibration with fresh air
Resolution	2 ppm – CO ₂ concentration,
.....	0.1 °C / °F - Temperature, 0.1% RH - Humidity
Numerical Liquid Crystal Display	Simultaneous display of
.....	* CO ₂ concentration (in ppm.)
.....	* temperature
.....	* RH %

Temperature

Temp. range	-10 °C ~ +60 °C
RH range.....	0 % ~ 95 %
DP (Dew Point Temperature).....	- 73.4 °C ~ +60 °C
WB (Wet bulb Temperature).....	- 13.3 °C ~ +60 °C
Measurement Range.....	0° to +60° C
Accuracy	±0,5° C

Data Output

Digital Interface RS232	Special cable
PC software.....	Windows 95/98/NT/ME/2000/XP Software and cable sold as option

Electrical:

External supply	Plug in transformer
Internal Battery.....	4 pcs AA batteries 24 hours capacity
.....	

General Performance:

Compliance with.....	EMC Directive 89/336/EEC
Storage Temperature Range	-20° to +70° C
Operating Temperature Range	0° to +50° C
Operating Humidity Range.....	0° to 95 % RH (non Condensing)
Size	209.4L*70W*57.7H (mm)
Weight.....	about 180g (battery excluded),
Sensor Life Expectancy	> 15 years
Power-up Time	< 30 sec. (full specs < 15 minutes)
Housing Material.....	.ABS/PC blend

* Can be changed without notice
PATENDED

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