**Now with
REAL TIME
CLOCK**

Model *SenseAir* ® *Alarm*
Portable Carbon Dioxide Alarm Unit

SenseAir ®

PRODUCT DESCRIPTION

Model SenseAir® Alarm is a very light-weight hand-held, pocket-sized alarm instrument with a digital display designed to measure the carbon dioxide concentration in surrounding air.
The large, clear display presents both current carbon dioxide concentration and the 8 hours Time Weighted Average (TWA) carbon dioxide value.
The carbon dioxide sensor's gold-plated infra-red waveguide and diffusion membrane filter provide you with great reliability, accuracy and long-term stability. Built-in data logging and alarm functions make SenseAir® Alarm the perfect choice for personal safety applications

The outer dimensions of 125x52x32 mm make SenseAir ® Alarm a unique portable alarm unit

FEATURES

- State-of-the-art non-dispersive infrared (NDIR) technology to measure carbon dioxide gas in volume percent and parts-per million (ppm)

- Displays both current carbon dioxide concentration and the 8 hour TWA carbon dioxide value on large, clear, built-in LCD

- Displays hazard levels on a clear green-yellow-red 5 step LED bar graph.

- Internal audible alarm.

- Internal automatic self-diagnostic function.

- Over 12 hours of continuous operation with internal, rechargeable Li-Ion battery.

- Pocket-sized - extremely handy and light- weight.

- Built in logger function with RTC (real time clock), supported by the free software UIP-P

APPLICATIONS

With a battery capacity covering more than 12 hours, its small size (125 x 52 x 32 mm) and a total weight of only 135 grams, the *SenseAir® Alarm* pocket-sized carbon dioxide instrument works perfectly as a personal safety alarm unit in hazardous environments, wherever carbon dioxide is produced, stored, generated and / or used.

The LED indicators in the green-yellow-red bar graph give a quick overview of the current carbon dioxide level and the 80 dB audible alarm calls for prompt attention when the short-term exposure safety limit is exceeded.

Due to the built-in logger function, the 8 hour long-term TWA (Time Weighted Average) exposure is also monitored to check against the labour regulations hygienic exposure limit standard. Together with a communication cable (accessory) and the user interface program UIP-P (freeware), it is possible to download and work with the samples during the logged period.

CERTIFIED
ISO 9001
SEMKO-DEKRA

Technical specification for the portable *SenseAir* ® *Alarm*
(rev. 0504)

Measurement:

Operating Principle	Non-dispersive infrared (NDIR) with gold plated optical cell
Gas Sampling Mode	Diffusion
Response Time (1/e)	2 min diffusion time & 15 sec at 0.2 litre/min gas flow
Measurement Range	0-3 % vol.
Extended Range	3-10 % vol. (accuracy not specified)
Accuracy at NTP (+25° C)	± 3 % of reading or ± 0.02 % vol., whichever is greater
Pressure Dependence	+ 1.6% reading increase per kPa deviation from normal pressure
Temperature Dependence	$\leq$ 0.005 % vol. / °C at zero gas level
	$\leq$ 0.015 % vol. / °C at 3 % vol. CO_2
Time Weighted Average (TWA) calculation	8 h time span (most recent) with 4 min sample period
	Reset can be selected during unit turn-on sequence

Alarm / Measurement Interface:

LEDs	5 step "bar graph" green-green-yellow-yellow-red LEDs with trip points defined by the present CO_2 concentration and preset comparator levels.
Numerical Liquid Crystal Display	Simultaneous display of
	* the current CO_2 concentration (in % vol.)
	* the 8 h CO_2 TWA value (in % vol.)
	* battery status indication
	* sensor status indication
Audible horn	Transducer with 2kHz resonance frequency, sounding during alarm status until push-button acknowledgement is pressed
Push-button	a single multi-purpose push-button
Internal Data Logger with RTC (Real Time Clock)	The latest 8 hours' TWA (Time Weighted Average) value of recorded CO_2 concentration data is shown on the display. Logged samples can be downloaded together with communication cable (accessory) and free software UIP-P.
Digital Interface	USB cable with UART-RS232 com driver
PC software	UIP-P Windows 95/98/NT/ME/2000/XP compatible software to
	* transfer and save logger data
	* configure Alarm Status and LED trip point levels
	* define user preferences
	* support sensor calibration

Electrical:

Battery Charger Input	6 VDC / 700 mAh, with NOKIA type miniature connector
Internal Battery	3,6 VDC / 1350 mAh Li-ion accumulator (> 12 h. capacity)
Battery Current Consumption	< 55 mA in normal mode
	< 100 mA in alarm mode

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)
Sensor Life Expectancy	> 15 years
Battery Life Expectancy	> 3 years
Self-diagnostics	complete power/sensor/ internal checks
Housing material	ABS/PC
Dimensions (L x B x D)	125 x 52 x 32 mm

Accessories:

Included in original purchase: monitor with internal battery, protective casing, communication cable, wall-plug battery charger

Optional accessories:	*art.no.*
PC communication cable	A232-0740
Battery charger for use in cars (12V)	A-0741-charger
Extra wall-plug battery charger	A-0740-charger
Replacement battery	1PSC340848-1350
Extra protection casing	0741-bag

Made in Sweden

CE