



# DIGITAL CO<sub>2</sub>/°C-METER

## Model 074001

### General:

Model 074001 is a very light (135 g.), pocket-sized (125x52x32 mm) instrument that measures carbon dioxide concentration and temperature in surrounding air.

The integrated large, clear display presents the current carbon dioxide concentration.

Built-in data logging makes, model 074001 the perfect choice for monitoring carbon dioxide concentration and temperature in a number of different applications and environments.

The carbon dioxide sensor's gold-plated infrared wave-guide 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 percent and parts per million (ppm)
- Integrated temperature sensor
- Displays the current carbon dioxide concentration and temperature on a large, clear, built-in LCD
- Displays the carbon dioxide level on a green-yellow-red 5 step LED bar graph
- Internal automatic self-diagnostic function
- More than 12 hours of continuous operation with internal and rechargeable Li-Ion battery
- Pocket-sized - 125 x 52 x 32 mm
- Extremely light - 135 grams

### Specifications:

#### Carbon Dioxide 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:	0-6000 ppm
Extended Range:	6000-10.000ppm (accuracy not specified)
Accuracy at NTP(+25° C):	± 3 % of reading or ± 20 ppm , whichever is greater
Pressure Dependence:	1.6 % reading increase per kPa deviation from normal pressure
Sleep Mode:	"Over-night" charging mode with activated ABC algorithm
Display:	Numerical Liquid Crystal Display
Simultaneous display of:	
	* the current CO <sub>2</sub> concentration (in ppm.)
	* temperature
	* battery status indication
	* sensor status indication

#### Temperature

Operating:	Principle Termistor
Measurement Range:	0° to 50°C
Accuracy:	±0,5° C

#### Electrical:

Battery Charger Input: ..VDC / 700 mAh, with NOKIA type tor

Internal Battery:	3,6 VDC / 1350 mAh i-ion accumulator (> 12 h. capacity)
Batt Current Consump.:	< 55 mA in normal mode with ppm/°C indicator

#### Logger and Software

Digital Interface	USB cable with sensor UART-RS232 com driver
Internal Data Logger	Logging of CO <sub>2</sub> and temperature by 896 samples each. Logger resets in Off mode
PC software	Windows 95/98/NT compat. Software to:
	* define personal user preferences
	* support sensor calibration
	* transfer and save logger data
	* view trend curves of logged data

#### General Performance:

Compliance with:	EMC Directive 89/336/EEC
Storage °C Range:	-20° to +70° C
Operating °C Range:	0° to +50° C
Operating RH Range	0 to 95 % RH (non Condensing)
Sensor Life Expectancy	> 15 years
Battery Life Expectancy	> 3 years
Self-diagnostics:	complete power/sensor/ internal checks
Status Indicator:	LCD triangle ikon = maintenance call
Power-up Time:	< 30 sec. (full specs < 15 minutes)
Housing Material:	ABS/PC blend
Dim. (L x W x D):	125 x 52 x 32 mm
Total Weight:	135 g