

CAPNOsleep

Capnography to measure CO₂ in exhaled air

CAPNOsleep was developed in conjunction with leading sleep physicians from the DGSM (German Society for Sleep Medicine) pathophysiology team for routine use in the sleep lab. Capnography provides clarity in sleep lab. Capnography provides clarity in sleep diagnoses, for example, by distinguishing between central and obstructive events, even when other signals don't allow unambiguous differentiation.



CAPNOsleep, WM 97105

CAPNOsleep helps with characteristic patterns ...

- ... for clear-cut recognition of periodic hyperventilation.
- ... for the differentiation between normal respiration and hypoventilation, e.g., in patients with respiratory insufficiency.

CAPNOsleep is ...

- ... quiet. Patients aren't disturbed or awakened by the sound of the sidestream pump.
- ... economical. The gas sample is taken via the nasal cannula. Long-term operation is made possible by a self-regenerating dry hose.
- ... simple. Only the most basic operating controls are available: on/off, calibration signal, restart after occlusion.

Bibliography:

Schläpke, M. E. et al.: Significance of CO₂ partial pressure as measurement parameter in sleep lab, *Somnologie*, Issue 4 (1): 184 - 196. 1997

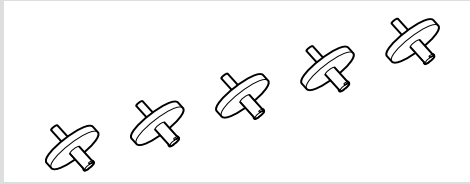
The carbon dioxide content in the air expired by the patient is determined with the help of capnometry. This non-invasive method is used for the continuous monitoring of ventilated patients, particularly in anesthetics, intensive care and pre-hospital emergency medicine.

In the sleep lab the blood's CO₂ content is one of the measurements the physician uses to assess the quality of respiration during sleep.

The sidestream capnograph CAPNOsleep transports the air to be examined by means of a pump into the measurement cell in the device. Therefore, a slight delay of about one to two seconds is seen between the standard respiratory signals (flow, effort in thorax and abdomen) and the CAPNOsleep capnogram.

Capnometry – gentle monitoring

1



Accessories

- 1 Set of Water Filters, 5 pieces, Ø 25 mm – WM 97010
Set of Water Filters, 5 pieces, Ø 13 mm – WM 97011 (not shown)
 - 2 Nafion Gas Dryer, 1 piece – WM 97013 (not shown) reusable
 - 3 etCO₂ Nasal cannula (not shown)
For adults, children, infants
- Calibration accessories:**
- 4 Kal Check Gas (5% CO₂, 95% O₂) – WM 97061 (not shown) in mini-can
 - 5 Pressure reducer for Kal Check Gas (WM 97061) with flow meter, Y-piece, hose – WM 67062 (not shown)

Our complete range of therapy solutions, accessories and mask systems is at: www.weinmann.de

Technical Daten CAPNOsleep



Product class as per 93/42/EWG:	IIa	Time until specification are reached:	2.5 min
Tested as per:	EN 864:1996	Suction flow:	150 ml/min. ± 10 %
Dimensions (W x H x D):	95 x 158 x 46 mm	Capnogram scan rate:	40 msec
Weight without power supply:	about 390 g	Data ports:	8-bit resolution
Electrical connection power supply:	230 V/50 Hz	Analog port Channel A (1 V) capnogram:	0 - 1 V \cong 0 - 75 mm Hg
Mean power consumption:	13 W	Analog port Channel B (1 V) etCO ₂ :	0 - 1 V \cong 3 - 75 mm Hg
Measurement process:	infra-red photometry	After switching Analog port Channel A (100 mV) capnogram:	0 - 100 mV \cong 0 - 75 mm Hg
Sound level < dB(A):	< 45 dB(A)	Analog port Channel B (100 mV) etCO ₂ :	0 - 100 mV \cong 3 - 75 mm Hg
Capnogram measurement range:	0 - 75 mm Hg	Reference (reset) key:	1 V (100 mV) for three sec 0 V for three sec
etCO₂ measurement range:	3 - 75 mm Hg	Connection to PSG:	Can be assembled by user, depending on PSG, or with connectio cable for diverse PSG, available upon request
etCO₂ and capnogram precision		Maintenance:	annual
■ 3 - 38 mm Hg:	± 2 mm Hg	Fine filter service life:	about 250 hours in normal ambient air
■ 39 - 75 mm Hg:	± 5 % of measured value		
One-day drift:	1 mm Hg		
Warm-up time:	about 15 sec		

3112-01-EN-0907-1 © Weinmann, Hamburg. Duplication of any kind only with the express permission of Weinmann. All rights to design and specification modifications reserved.

■ **Germany** ■ Weinmann Geräte für Medizin GmbH+Co.KG · P.O.Box 540268 · D-22502 Hamburg · Kronsaalsweg 40 · D-22525 Hamburg · E: info@weinmann.de · www.weinmann.de · T: +49-(0)40-5 47 02-0 F: +49-(0)40-5 47 02-461 ■ Weinmann Diagnostics GmbH+Co.KG · Doerriesweg 3 · D-22525 Hamburg · T: +49-(0)40-5 47 02-435 · F: +49-(0)40-5 47 02-530 · E: info@weinmann-diagnostics.de www.weinmann-diagnostics.de ■ Center for Production, Logistics, Service · Weinmann Geräte für Medizin GmbH+ Co.KG · Siebenstücken 14 · D-24558 Henstedt-Ulzburg · T: +49-(0)4193-88 91-0 F: +49-(0)4193-88 91-450 ■ **Switzerland** ■ G. Weinmann AG – Neuenhof · T: +41-(0)56-416 41 11 · E: info@ch.weinmann.de · www.weinmann.de ■ **France** ■ Weinmann S.A.R.L. – Paris-Igny T: +33-(0)1 69 35 53 20 · E: info@fr.weinmann.de · www.weinmann.de ■ **Asia-Pacific** ■ Weinmann (Asia-Pacific) Co.Ltd. – Bangkok · T: +66-(0)2-7 63 67 00 · E: info@asia.weinmann.de · www.weinmann.de ■ **Australia** ■ Weinmann (Australia) Pty. Ltd. – Melbourne · T: +61-(0)3-95 43 91 97 · E: info@au.weinmann.de · www.weinmann.de ■ **New Zealand** ■ Weinmann (New Zealand) Ltd. – New Plymouth T: +64-(0)6-7 59 22 10 · E: info@nz.weinmann.de · www.weinmann.de ■ **China** ■ Weinmann GmbH+Co.KG (Shanghai Rep. Office) · T: +86 21 32 26 26 98 · E: info@cn.weinmann.de · www.weinmann.de