CIDELEC

Smart-PSG

Bluetooth
Touchscreen
Connected

MADE IN FRANCE

SLEEP
LABORATORY
EQUIPMENT

EFFICIENT

DIAGNOSE

INTUITIVE

ANALYSE

INTERACTIVE

MOBILE

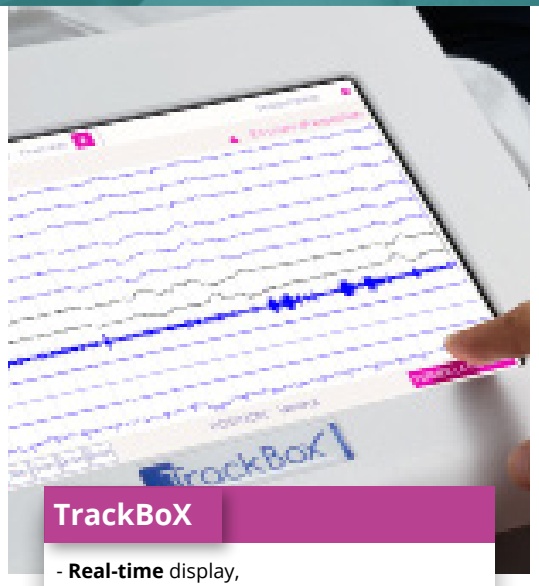
CONNECTED

RELIABLE

/ HOW IT WORKS

CID-LXr

- Placed **on the patient**,
- Measures **electrophysiological signals**,
- **Wireless communication** with TrackBoX,
- Used as a **polysomnograph** or a **polygraph**



TrackBoX

- **Real-time** display,
- **Programming** of recording,
- **Remote** supervision,
- **Touch** screen

TrackBoX Manager

- TrackBoX remote **visualisation,**
- Remote **management** of one or more Smart-PSG devices,
- **Supervision** of examinations

CIDELEC software

- Automatic signal **analysis** ,
- Signal **interpretation**,
- **Data** archiving,
- **Customised reports**

These products are CE marked medical devices.

/ WE OFFER

CIDELEC provides:

- **Training and installation of products on site** by our team,
- **Innovative technology of our systems** to obtain precise and reliable measurements
- **Analysis and processing of information** with the creation of personalised reports,
- **After-sales service**, technical assistance and technical expertise

DEVICES DESIGNED & MADE IN FRANCE

CIDELEC, 30 YEARS YOUR PARTNER

Technical characteristics TrackBoX

Dimensions: 290 x 215 x 155 mm- Weight: 3,2 kg

Channels	Bandwidth	Sampling frequency	Storage	Accuracy	Dots	Range
Pneumotachograph	0 - 10 Hz	4000 Hz	16 Hz	+/- 4 %	4096	+/- 1litre/s
Machine pressure	0 - 10 Hz	4000 Hz	256 Hz	+/- 25 Pa	4096	0 - 2 kPa
Analogue input	0 - 160 Hz	4000 Hz	256 Hz		24 bits = 16 777 215	+/- 1V
Luminosity		1 Hz	1 Hz		255	0 - 100 Lux

Technical characteristics CID-LXr

Dimensions: 32 x 82 x 114 mm - Weight: 152 g- Battery: Li-Po 1700 mAh - 3,7 V

Channels	Bandwidth	Sampling frequency	Storage	Accuracy	Dots	Range	Others
Breathing sound	200 - 2000 Hz	4000 Hz	Sound intensity at16 Hz		256		Sensitivity 20 - 80 dB Adaptive threshold
Snoring sound	20 - 200 Hz	4000 Hz	Sound intensity at 16 Hz		256		Sensitivity 60 - 120 dB Adaptive threshold
Supra-sternal pressure	0,02 - 20 Hz	4000 Hz	8 Hz		4096	+/- 100 Pa	
Position		1 Hz	1 Hz				5 positions
Actimetry		1000 Hz	8 Hz				
Nasal flow	0 - 10 Hz	4000 Hz	256 Hz		65536	+/- 300 Pa	
SpO_2 (1)			1 Hz	+/- 3 % (from 70 to 100 %) (2)	100	0 - 100 %	Averaged over 4 pulse cycles
Pulse frequency (1)			1 Hz	+/- 5 BPM (2)	256	40 - 240 BPM (2)	
Photoplethysmogram (1)			64 Hz				
Inductive belts	0,1 - 10 Hz	32 Hz	8 Hz		65536		
6 EEG channels	45 Hz	500 Hz	250Hz		65536	1627 µV	Built-in 50 Hz noise tester
2 EOG channels	45 Hz	500 Hz	250Hz		65536	1627 µV	Built-in 50 Hz noise tester
1 ECG channel	45 Hz	500 Hz	250Hz		65536	6510 µV	Built-in 50 Hz noise tester
4 EMG channels	10 - 100 Hz	4000 Hz	64Hz		256		

(1) Nonin manufacturer
(2) Under worst-case conditions

Take advantage of CIDELEC technology with PneaVoX sensor accuracy

Remote supervision
Bluetooth connectivity
Signal analysis

OUR OBJECTIVE : ENABLING YOU TO USE ACCURATE, COMPLETE AND RELIABLE RECORDINGS.

/ PneaVoX

PneaVoX technology is unique.

One sensor records 3 physiological parameters :

- Buccal and nasal **breathing**,
- **Respiratory effort** via suprasternal pressure to differentiate between obstructive, central and combined apneas,
- **Snoring** (energy, intensity).

Finally, the PneaVoX sound sensor **analyses upper airway resistance** by measuring the sound intensity.

«The ***PneaVoX sound sensor***, to improve differentation between sleep disorders via the analysis of tracheal sounds.»

PNEAVOX® TECHNOLOGY

/ SCIENTIFIC BIBLIOGRAPHY

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A. Amaddeo, M. Fernandez-Bolanos, J.O. Arroyo, S. Khirani, G. Baffet, B. Fauroux. ***Validation of a Suprasternal Pressure Sensor for Sleep Apnea Classification in Children,*** *Journal of Clinical Sleep Medicine, Vol. 12, No. 12, 2016.*

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The SMART-PSG is a medical device classified IIa range, manufactured by the CIDELEC company - CE N°0459
The SMART-PSG is a system for recording physiological signals, for the diagnosis of sleep disorders.
Read the instructions carefully before use.
Document modified in 07/2023

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