



# CID-LXe



Standalone  
Innovative  
Reliable

MADE IN FRANCE

**PORTABLE  
POLYSOMNOGRAPH**

[www.cidelec.net](http://www.cidelec.net)



Signal readings and  
analyses



Benefit from the  
combination of  
CIDELEC technology  
and the precision of  
PneaVoX



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

STANDALONE

REFERENCE

COMPLETE

PORTABLE

CONFIDENCE

## / HOW IT WORKS



### CID-LXe

- **Installed** on the patient
- **21 channels** integrated into the device
- **Usable** for MSLT MWT



### CIDELEC software

- **Automatic analysis** of the signals
- **Review** of the traces
- **Archiving** of data
- Customisable **summaries**

## / WE OFFER

CIDELEC provides:

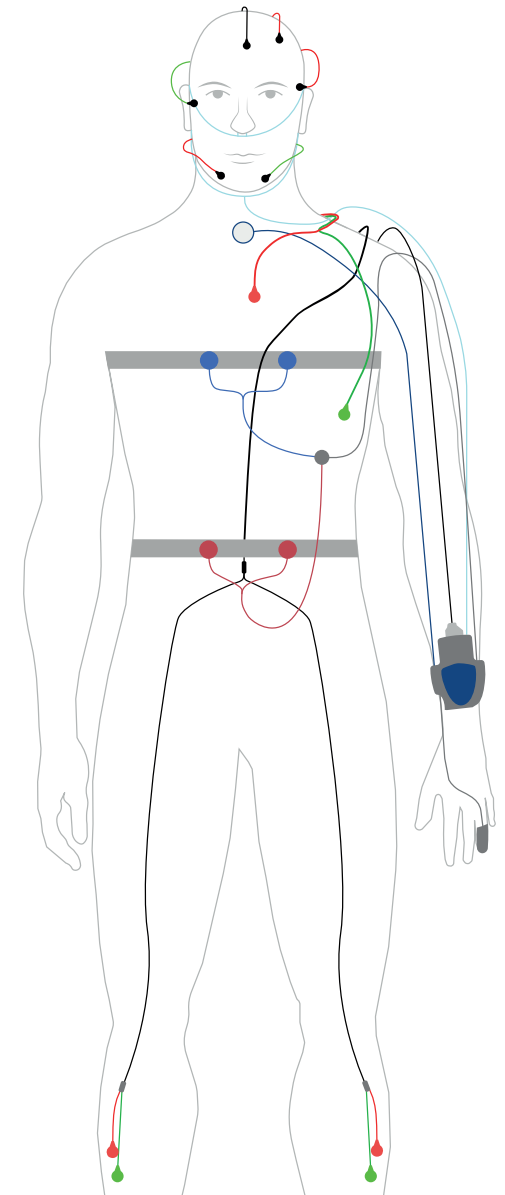
- **Training and installation of products on site** by our team,
- **Innovative technology of our systems** to obtain precise and reliable measurements
- **Analysis and processing of information** with the creation of personalised reports,
- **After-sales service**, technical assistance and technical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



## CLICK 'N CID



DOWNLOAD THE APP  
FOR A 3D INSTALLATION OF  
OUR PRODUCTS.



**CIDELEC,**  
**30 YEARS**  
YOUR PARTNER



# / PERFORMANCE & QUALITIES

For almost 30 years, our devices to aid the diagnosis of sleep-related or sleep-aggravated pathologies have been designed and manufactured in France.

CIDELEC supports you throughout their use: presentation, sales, installation, user training, telephone assistance, after-sales service.

The CID-LXe-206d model also has a pressure channel for the connection of a pneumotograph when the patient uses cPAP/BIPAP treatment.



## Technical characteristics CID-LXe

20 channels available

Channel 21: only on CID-LXe-206d

Dimensions: 32 x 82 x 114 mm- Weight: 135 g- Battery: Li-Po 1700 mAh - 3.7V

CHANNELS	BANDWIDTH	SAMPLING FREQUENCY	STORAGE	PRECISION	POINTS	ELONGATION	OTHER
Breathing sound	200 - 2000 Hz	4000 Hz	Sound intensity to 16 Hz		256		Sensitivity 20 - 80 dB Adaptive threshold
Snoring	20 - 200 Hz	4000 Hz	Sound intensity to 16 Hz		256		Sensitivity 60 - 120 dB Threshold 76 dB
Suprasternal pressure	0.02 - 20 Hz	4000 Hz	8 Hz		4096	+/- 100 Pa	
Position		1 Hz	1 Hz				5 positions
Actimeter		1000 Hz	8 Hz				
Nasal flow	0 - 10 Hz	4000 Hz	256 Hz		65536	+/- 300 Pa	
Machine pressure	0 - 10 Hz	4000 Hz	256 Hz	+/- 25 Pa	4096	0 - 2 kPa	Up to 4 kPa on request
SpO <sub>2</sub> <sup>(1)</sup>			8 Hz	+/- 3% (between 70 and 100%) <sup>(2)</sup>	100	0 - 100%	Averaged over 4 pulse cycles
Pulse rate <sup>(1)</sup>			8 Hz	+/- 5 BPM <sup>(2)</sup>	256	40 - 240 BPM <sup>(2)</sup>	
Photoplethysmogram <sup>(1)</sup>			75 Hz		65536		
Inductive straps	0.1 - 10 Hz		32 Hz		65536		
EEG channels	0.2 - 35 Hz programmable	500 Hz	128 Hz		65536	860 µV	Built-in 50 Hz noise tester
EOG channels	0.2 - 35 Hz programmable	500 Hz	128 Hz		65536	200 µV	Built-in 50 Hz noise tester
ECG channel	0.2 - 35 Hz programmable	500 Hz	128 Hz		65536	860 µV	Built-in 50 Hz noise tester
EMG channels	10 - 100 Hz	4000 Hz	64 Hz		256	20 µV	
Pneumotachograph <sup>(3)</sup>	0 - 10 Hz	4000 Hz	16 Hz	+/- 4%	4096	+/- 1 litre/s	
Thermocouple	0.2 - 35 Hz programmable	500 Hz	128 Hz		65536		

(1) NONIN manufacturer

(2) Under the least favourable conditions

(3) Only available on CID-LX-206d

# / 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 differentiation between sleep disorders via the analysis of tracheal sounds.*»

**PNEAVOX**<sup>®</sup>  
TECHNOLOGY

## / SCIENTIFIC BIBLIOGRAPHY

M. Glos, A. Sabil, K.S. Jelavic, C; Schöbel, I. Fietze, T. Penzel.  
*Characterization of respiratory events in obstructive sleep apnea using suprasternal pressure monitoring.*  
*J Clin Sleep Med.* 2018; 14(3): 359-369.

Penzel T, Sabil A. *The use of tracheal sounds for the diagnosis of sleep apnoea.*  
*Breathe* 2017; 13: e37-e45.

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.*

[...]

## PURCHASE



**CIDELEC**

20 rue des Métiers

49130 SAINTES GEMMES SUR LOIRE - FRANCE

Tel: +33 (0)2 41 66 20 88 - Fax: + 33 (0)2 41 79 07 76

Email: [service.commercial@cidelec.net](mailto:service.commercial@cidelec.net)

Website: [www.cidelec.net](http://www.cidelec.net)

The content of this brochure (text, illustrations, drawings, images, etc.) is the exclusive property of CIDELEC. The CIDELEC logo and names, CID, CID102, TrackBox and PneaVoX are trademarks registered by CIDELEC. CIDELEC reserves the right to modify this document at any time.

The CID-LXe is a class IIa medical device, manufactured by CIDELEC - CE No. 0459

The CID-LXe is a device for collecting physiological signals for the diagnosis of sleep disorders.

Read the product instructions carefully before use. Document modified on 09/2021