

## DIAGNOSTICS



# DIAGNOSTICS CATALOG

# Content

## **Polygraphy**

Scala.....	3
MiniScreen premium.....	3
MiniScreen plus.....	3
SOMNOcheck micro CARDIO.....	3

## **Polysomnography**

Sonata.....	4
MiniScreen PRO .....	4

## **Equipment**

PG / PSG Mobile Cart.....	5
Functional Unit for Treatment.....	5
Audio/Video Installation Unit.....	6
Sensor Cabinet.....	7
Analysis Workstation.....	8

## **Other diagnostics**

LEOSound.....	9
Radiometer TCM 5.....	9
Sentec SDM.....	10
Pupillograph F2D2.....	10

## **Software**

Sleep Xpert App.....	11
Sleep Xpert Lab.....	11

**NEW!**



## Scala

Scala is primarily a standard polygraph device used to detect Sleep-Disordered Breathing. Equipped with 19 channels, it also offers a variety of other functions for different user groups – in a single device. Because Scala can do so much, the device may be used in medical specialty areas such as pneumology, cardiology, HNO, sleep medicine and neurology.



## MiniScreen premium

MiniScreen premium is the new 12-channel, EBM 30900-ready cardiorespiratory polygraph from Löwenstein. The device's strength lies in the measurement of the airflow during PAP treatment. For ventilation modes like BiLevel and ASV, which require quickly changing, high pressures, the integrated differential pressure measurement provides an excellent airflow signal. That makes MiniScreen premium perfectly suited for use in routine examinations and Non-Invasive Ventilation monitoring. Still another device strength is seen in the analysis of autonomous arousals, which permits reliable analysis of RERA (Respiratory Effort-Related Arousals) in polygraphy.



## MiniScreen plus

MiniScreen plus is the reliable standard polygraph with 12 channels eligible for billing in accordance with EBM 30900. The device can be expanded easily with the addition of a neural signal, ECG or the recording of leg movements. The MiniScreen plus is particularly impressive for its low follow-up costs, low weight, small dimensions and simple operation. Regular software updates are free during the life of the device. Several recordings can be programmed in advance.



## SOMNOcheck micro CARDIO

Detection of Sleep-Disordered Breathing and Cardiovascular Risk

In a first, this sleep screening device determines the Cardiac Risk Index (CRI) in addition to the well-known parameters of AHI, EI, Arousal Index, pulse and snoring. CRI provides information about your patient's cardiovascular risk, any existing cardiovascular diseases and diagnostic steps. The basis for the analysis is the pulseoxymetric-ascertained pulse wave, with whose help arrhythmia and Cheyne-Stokes Respiration also can be detected. The Red-Amber-Green presentation of the analyzed risk factors provides clear analysis and assessment quickly. Its detection of SDB and cardiovascular risk also is helpful in the fields of dentistry, internal medicine and cardiology.



## Sonata

Today's modern polysomnography systems have to satisfy many different requirements. With the new 65-channel PSG system Sonata, Löwenstein Medical offers a solution for a range of demanding uses. Based on more than 25 years of experience in sleep diagnostics, Löwenstein Medical developed a PSG system with simple operation, attractive design, ultra-modern technology and unmatched flexibility. Of course Sonata also boasts AASM compatibility, low follow-up costs and low maintenance.



## MiniScreen PRO

The innovative 48-channel PSG system from Löwenstein Medical features great flexibility and stability in daily use. MiniScreen PRO offers a full range of options from out-patient recordings to AASM-compliant polysomnography in the sleep lab. Simple operation, stability, low follow-up costs and low expenditures for consumables make MiniScreen PRO a reliable and economic partner for sleep diagnostic examinations.



## PG / PSG Mobile Cart

The Mobile Cart accommodates the full range of sleep diagnostics equipment, from audio/video and therapy device management to a computer. The cart can be rolled to the patient's bedside, where the sleep diagnostic examination can be started and conducted. The audio/video signal and signals from external devices (e.g., therapy devices or transcutaneous CO<sub>2</sub> measurements) are integrated synchronously with the data from the sleep diagnostic device. Because the Mobile Cart is tip-proof, it can be used without any trouble in different rooms or units.



## Functional Unit for Treatment

The smart solution for the patient's room.

The mobile device cabinet serves as the interface connecting therapy device, polysomnography and the patient. A tidy and smart solution for patient room installations, the unit organizes technical components for therapy device management, signal feeds and PSG cable management.

The surface can be disinfected and, thanks to many decor variants, the unit can be incorporated into any room design. It satisfies all requirements for medical technology, hygiene and electrical safety.





## Audio/Video Installation Unit

An infrared light is mounted on the Audio/Video Installation Unit to allow video observation of patients during the night. The unit, which contains everything required for technical installations, can be installed on the ceiling or the wall. The tidy solution for installation holds all components for the integrated intercom system and features high quality sound and video. The specifications that professionals demand for a swivel-tilt-zoom camera are fulfilled.

The decor variants can be matched to the PSG cabinet or room design. The Audio/Video Installation Unit fulfills all requirements for medical technology, hygiene and electrical safety.





## Sensor Cabinet

The sensor cabinet has plenty of clean storage space for required PSG accessories such as sensors, electrodes, cables and application material. When recordings are not being made, everything can be put away properly and secured out of sight.

The decor variants can be matched to the PSG cabinet, the Audio/Video Unit and the overall room design.





## Analysis Workstation

The Analysis Workstation is specially designed to fulfill the sleep lab's need for a dedicated place for analysis. The work surface has enough depth to accommodate a computer and space for documents. Screens for monitoring patient rooms can be installed on two different levels to save space and permit small rooms to be used as monitoring stations for sleep lab recordings. The front sides of the tables are equipped with inspection flaps behind which all electrical cabling is properly stored.

The decor variants can be coordinated with the furniture and room concept.

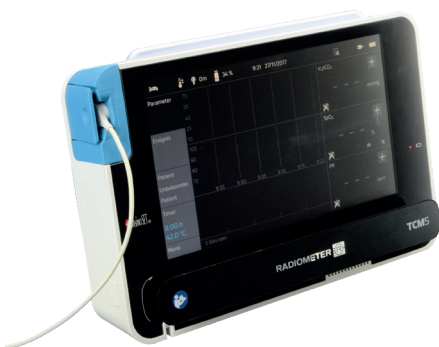






## LEOSound

LEOSound is a unique, completely new diagnostic system for long-term registration of breathing and breathing noises such as wheezing, stridor, crackles and coughing. Sounds can be registered for up to 24 hours. LEOSound can therefore be considered a type of electronic long-term stethoscope, suitable for use with children and adults. The recording is made by a special high resolution microphone and is automatically analyzed for wheezing and coughing. For the first time, it is possible to obtain objective proof of symptoms and quantification in the diagnosis and treatment monitoring of bronchial asthma and coughing.



## Radiometer TCM 5

The transcutaneous TCM 5 Monitor offers a convenient and reliable method to obtain important and precise values for monitoring ventilation and oxygen saturation. It sets new standards in continuous monitoring with several parameters such as tcpCO<sub>2</sub>, SpO<sub>2</sub>, pulse rate and Perfusion Index (PI) for adults and children. The TCM 5 can be easily integrated in the sleep lab concept from Löwenstein Medical.

Delivery outside Germany upon request

Other diagnostics



## Sentec SDM

The SenTec Digital Monitoring System (SDMS) with the V-Sign™ sensor permits continuous and non-invasive transcutaneous real-time monitoring of carbon dioxide partial pressure (pCO<sub>2</sub>), oxygen saturation (SpO<sub>2</sub>) and pulse.

The V-Sign™ sensor can be placed simply on the ear or – to monitor pCO<sub>2</sub> only – on a conventional pCO<sub>2</sub> measurement point. The SDMS reacts quickly and accurately to changes in the patient's pCO<sub>2</sub> and/or SpO<sub>2</sub>. Enhance your patient monitoring with complete information about ventilation and oxygenation. You'll also increase safety and convenience for patients and medical personnel. The SenTec SDMS can be easily integrated in the sleep lab concept from Löwenstein Medical.

Delivery outside Germany upon request



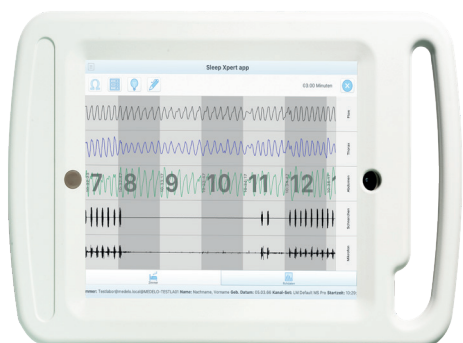
## Pupillograph F2D2

The AMTech Pupillograph F2D2 is an easy-to-use non-invasive test device that delivers objective measurements of activity in the central nervous system and the pupillary light reflex. Spontaneous pupillary oscillations known as "sleepiness waves" are biological markers of sleepiness.

Application areas for the F2D2 include sleep medicine, occupational medicine, pharmacology and forensic medicine. The new requirements of the assessment guidelines for determining a person's ability to drive are fulfilled. The test device, which is an alternative to MSLT/MWT, can be used in the hospital and medical practices, in the field and at work. It also can be easily integrated in the sleep lab concept from Löwenstein Medical.

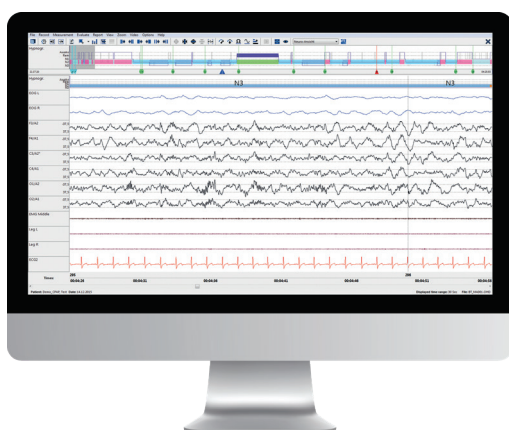
Delivery outside Germany upon request

Other diagnostics



## Sleep Xpert App

The Sleep Xpert App eliminates time-consuming trips between patient room and monitoring station while cable is laid and the recording is started in the sleep lab or ventilation unit. With the app the user can execute all important processes such as recording start, impedance measurement, bio-signal calibration, signal monitoring and commentary entry right from the patient's bedside. The relevant patient room can be selected in the app running on a mobile device such as a tablet. The Sleep Xpert App works with the Löwenstein Medical PSG system Sonata, MiniScreen PRO, the online MiniScreen plus and MiniScreen premium.

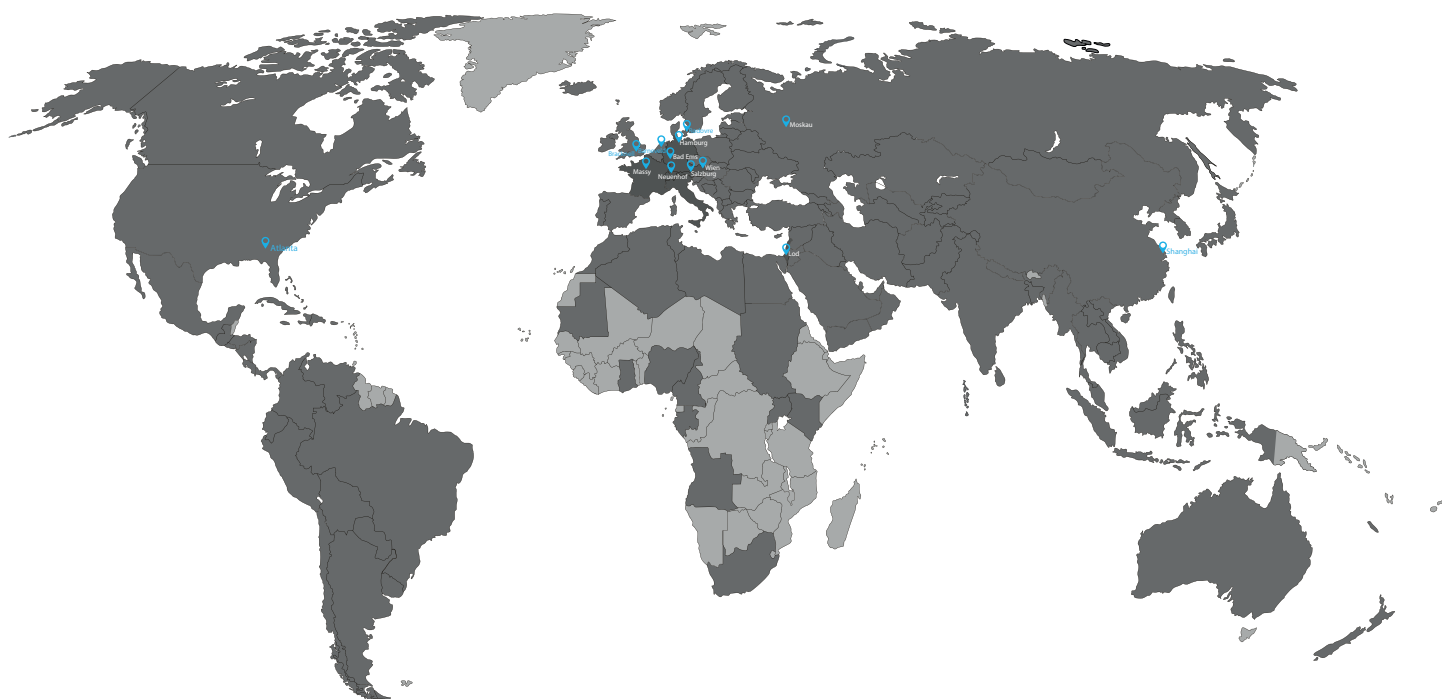


## Sleep Xpert Lab

The products Sonata, MiniScreen PRO, MiniScreen premium and MiniScreen plus can be operated with one and the same software, Sleep Xpert Lab. It is software for all sleep diagnostic products from Löwenstein Medical, regardless of the required range of features. Functions, operating elements and views can be customized to satisfy personal needs. Particularly noteworthy are the configurable report, transparency, settings for analysis criteria, the automatic detection of pressure modes (CPAP/BiLevel) and the simplicity of operation. The software is available in 10 languages. EDF data can be imported and exported with no trouble at all.

Software

# DIAGNOSTICS CATALOG



All rights reserved, including the right to make technical changes without notice.

