

# **Sleep Therapy**

Therapeutic solutions for every case.



# prisma

## Sleep therapy solutions from Löwenstein Medical.

Diagnoses of **Sleep Disordered Breathing (SDB)** are increasingly being made by doctors in many different medical fields. The consequences from SDB span the range from daytime sleepiness with decreased productivity, high blood pressure and heart attack to stroke.

For several decades we have been developing reliable, specialized technologies for sleep medicine. Our focus is on patient safety, treatment success and operating convenience.

**The result** is device and service solutions that provide the patient with highly effective treatment. Thanks to their intuitive use, product compatibility and low maintenance, you simplify work processes, leaving more time to concentrate on the patient.

#### TIPP

Our White Paper Edition for experts offers detailed information based on current studies:

- Sleep Quality in CPAP/APAP Therapy. Links compliance, leakage, AHI and therapeutic success.
- Central Respiratory Events during CPAP/APAP Therapy. Challenges and therapeutic solutions.
- Patient self-management in PAP therapy. Options with mobile applications and the effect on therapy success.

You'll find our White Paper as a PDF file available for downloading on our Website.





## Precison, reliability and unheard-of silence.



\* smartAQUAcontrol : not available in prisma SOFT / SMART

### prisma – Special features. Your benefits.



#### Effortless, standard operation in the entire prisma series

The combination of a large screen (touch, LED) and smart menu navigation ensures intuitive and quick use – in every way ideal support for your varied work processes.



#### Intelligent humidification without sensors: smartAQUAcontrol (SAC)

With use of the humidifier prismaAQUA, smartAQUAcontrol can be added as an option. For a feeling of warmth in the airflow at the start of treatment and assurance of adequate humidification in phases of increased leakage.



#### Pressure reaction fits patient's needs

Patients react with varying sensitivity to pressure adjustments. For effective therapy and breathing comfort, two options for pressure adjustments are available in APAP mode:

- Dynamic pressure adjustment for maximum normalization of inspiratory curve
- Standard pressure adjustment with equal reliability in cases of serious events such as apnea and hypopnea and gentler pressure reaction for mild events, aimed at encouraging patient acceptance.

Additional mechanism prevents unnecessary pressure increases in response to central events with closed upper airways.

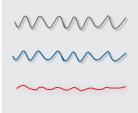




#### Precise event recognition

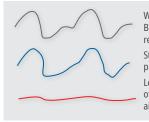
With the help of "Forced Oscillation Technique" (FOT) in modes without back-up frequency or with "Forced Breath Technology" (FBT) in modes with backup frequency, reliably precise differentiation is made between central and obstructive apnea. Hypopnea too is reliably differentiated and recognized, as are other events such as Cheyne-Stokes respiration, flow limitations, snoring and RERA.

#### Forced Oscillation Technique (FOT)



Without respiratory drive: Oscillatory pressure signal generates air flow and measures resistance in upper airways. Strong flow of air (low reflection of pressure wave): open upper airways Low or no flow of air (strong reflection of pressure wave): obstruction in upper airways

#### Forced Breath Technique (FBT)



Without respiratory drive: Backup frequency active, measures resistance in upper airways Strong flow of air (low reflection of pressure wave): open upper airways Low or no flow of air (strong reflection of pressure wave): obstruction in upper airways



#### Deep sleep and respiratory stability indicators, thanks to prisma RECOVER

During therapy, prisma RECOVER continuously analyzes the patient's breathing pattern and recognizes the phases of stable respiration that indicate deep sleep, a particularly restorative sleep phase. In BiLevel modes too the phases of highly stable respiration are detected and reported. For the first time ever, this function can assess therapy success with regard to sleep quality in prisma JOURNAL, prismaTS or tele-monitoring with prisma CLOUD.



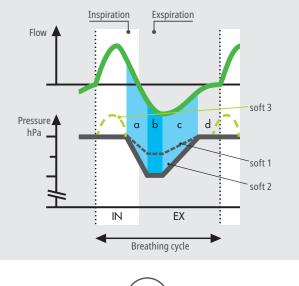
#### Comfortable sleep onset – comfortable waking: softSTART and softSTOP\*

To make it easy for the patient to fall asleep, activate softSTART, which provides a slower pressure increase over a pre-set time until therapy pressure is reached. With a slow pressure reduction, softSTOP makes sure that the end of treatment is comfortable too.\*



#### Pressure relief softPAP

During treatment the pressure in CPAP and APAP modes is decreased at the start of expiration and then increased again to therapy pressure at the start of inspiration to make exhalation easier and effectively prevent events. In softPAP Level 3 too inspiration is supported with a slight pressure increase – especially at lower pressures\*\* – to give the patient more comfort.





#### Maximum flexibility in BiLevel modes

- Additional pressure relief (Bi sof1 / Bi soft2)
- In addition to the familiar BiLevel mode and an ajustable EPAP, two optional pressure relief settings with varied pressure reductions in early expiration phases can be activated to increase the patient's breathing comfort.
- Additional automatic regulating pressure difference (autoPDIFF)

Dynamic IPAP adjustments to hold open the upper airways during inspiration and a slighter EPAP adjustment during expiration effectively prevent partial obstructions. Available in the modes autoS and autoS/T.

• (auto)TriLevel: Safety and breathing comfort (auto)TriLevel, unlike BiLevel, offers the same ventilator breath at a lower pressure level to give patients more breathing comfort.

<sup>\*</sup> softSTOP available in prisma30ST (not available in all markets) \*\* only in prisma LINE and prismaLAB

## Löwenstein software solutions. Simple. Flexible. Reliable.



# The telemedicine solution for you and your patients.

With prisma CLOUD you can monitor your patients' therapy reliably and simply. You'll have access to up-to-date information about treatment fully automatically from anywhere.

#### prisma APP

#### The APP for my prisma.

The prisma APP is digital assistance that patients can use to optimize their therapy. The digital therapy journal clearly presents all relevant data and additional information. prisma APP is available for iOS and Android devices.

#### prisma JOURNAL



#### Everything at a glance. For patients.

prisma JOURNAL assists patients with self-management of their therapy without requiring that they transmit any data. All relevant treatment data from the SD card can be completely presented in prisma JOURNAL and reports can be generated.

#### prismaTS and prismaTSlab

#### Accompanying software solution. For experts.

From a quick check to detailed therapy analysis, prisma TS and prisma TSlab offer an ideal overview of all relevant data for every work step.

Therapy software complete with USB data cable, WM 93335



### prismaLINE Accessories overview



WM 29680

WM 29490

**prismaAQUA** Humidifier black white



prismaCONNECT Connection module WM 29670



prisma CHECK SpO<sub>2</sub> measurement WM 29390 + connection cable WM 35581 Softtip sensors S: WM 35532, M: WM 35533, L: WM 35534



prisma HUB Connection module SOFT/SMART WM 31660



Modem for prismaCLOUD prisma SOFT/SMART WM090TD WM 31740 prismaLINE WM100TD WM31240





**Breathing tube** Ø 15 mm, WM 29988 Ø 22 mm, WM 24445 Ø 22 mm, autoclavable, WM 24667



prismaHYBERNITE Heatable breathing tube for prismaLINE (WM100TD) Ø 15 mm, WM 29083 Ø 22 mm, WM 29067



WM 29045

Medistrom Pilot-24 lite battery WM 31704 for prisma SOFT/SMART

**Power inverter** 24 V, Truck, WM 24617 12 V, Auto, WM 24616

**DC Adapter** 12/24 V, WM 24469 for prisma SOFT/SMART



Bacteria filter WM 24476

Set 12 Pollen filters WM 29652





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