

Restful sleep ...

...through high precision

The MAP breath algorithm recognises - breath by breath - the characteristics of obstructive respiration. Through a precise analysis, irregularities in breathing and sleep are reliably made out. The MAP breath algorithm uses flow limitations as the most sensitive parameter for fine-tuning the relevant therapeutic pressure. Personal habits such as the daily nightcap or a preferred sleeping position, and even changes in weight, the taking of medication or a cold, do not detract from the therapeutic efficiency, because Magellan adapts to the patient's individual requirements.

Coughing, clearing one's throat or talking in sleep are recognised as such by Magellan and do not trigger changes in pressure. Pressure corrections are only carried out when they are really required physiologically. If necessary, the pressure is gently adjusted, without disturbing the patient's sleep.

...through reduction of side effects

The integrated humidifier ensures adequate moistening of the upper airways, thus effectively preventing a possible irritation of the mucous membranes through drying out. On average, the therapeutic pressure is lower, which helps to reduce the incidence of mouth and mask leakages. Side effects such as rhinitis or conjunctivitis are diminished and compliance is increased.

...through quick beginning of the therapy

Magellan is characterised by its low operating noise level, its easy handling concept and its low pressure variations. This and the above-mentioned advantages of Magellan help the physician and the staff of the sleep laboratory to quickly induct the patient into the therapy. More patients will readily accept the therapy within a shorter time, especially in the critical phase of adjustment. Magellan makes restful sleep possible...


...for the patient.



Technical data

Magellan® iPAP

Product class	Ila according to MPG (Medizinprodukt-gesetz = German law of medical devices)
Electrical protection	2 internal microfuses, 230 V/2 AT, protection class II, type B
Power connection	100 V AC to 240 V AC, 2.2 A AC to 1 A AC, 50 Hz / 60 Hz, automatic voltage and frequency recognition
Power consumption	Stand-by operation: 9.6 W, Air humidifier off: 28.8 W, Air humidifier on: 38.0 W
Pressure range	4 to 18 hPa (mbar), adjustable in 0.1 hPa increments
Pressure stability	4 to 10 hPa (mbar) ± 0.5 hPa, 10 to 18 hPa (mbar) ± 5%
Pressure fluctuation	4 to 10 hPa (mbar) ± 0.25 hPa, 10 to 18 hPa (mbar) ± 0.5 hPa, measured according to EN ISO 17510-1 with P = 6 / 12 / 18 hPa; at VT = 500 ml with 10 / 15 / 20 sinusoidal waves/minute
Maximum air litre performance	185 l/min
Level of acoustic pressure	< 30 dB(A), measured according to EN ISO 17510-1 at 10 hPa (mbars)
Air humidifier	Integrated cold and warm air humidifier with continuous temperature control
Humidifier performance	At least 90 % relative humidity in the air mask (at 23 °C ambient temperature and 60 % surrounding humidity, 10 hPa, 26 l/min and maximum humidifier performance)
Additional features	2-pole mains switch for turning off stand-by operation (rear of the device) Start-/stop button on the device's front Keyboard for menu selection and setting parameters Liquid crystal display for checking all settings (Sleep ramp, automatic start/stop, language, time, operating hours, breathing hours, next due for service, mode of operation, initial pressure, target pressure, software, serial number) Sleep ramp adjustable from "off" to 30 minutes in 5-minute increments Automatic start/stop on/off Selectable display language (D / GB / F / NL / E / I / TK)
Dimensions	330 mm x 183 mm x 190 mm (L x W x H)
Weight	approx. 4 kg
Remote control	Remote control connection for the physician for setting and displaying the parameters (Twister remote®), Display of the respiratory flow curve on the remote control device (Twister remote®)
External interface	Analogue outputs for connection to the sleep laboratory. The minni Max nCPAP® interface can be used. (Pressure and flow)
Scope of delivery	Air hose 1,8 m, power cord 2-pole, emergency document, 2 filters, operating instructions, hygiene box.
LOGSoft® analysis software	LOGSoft® presents the respiratory raw data of the last therapy night as well as all respiratory events over the past 1 to 160 days in a graphical and tabular form that is easy to understand

Safety standards	CE designation in accordance to class Ila as described in EU-guideline 93/42/EWG	
DIN EN 60601-1	General specification for the safety of medical electric devices	
DIN EN 60601-1-2	Supplement: Electromagnetic compatibility	
EN ISO 17510	Sleep apnea therapy device	
Quality Management:	Development, manufacture, distribution and service certified according to ISO 9001 and EN 46001	
Maintenance guidelines	The components important to hygiene may be cleaned and serviced very easily at home without any major effort. The filter should be replaced every 6 months. If all the maintenance and cleaning instructions are followed, technical service by MAP's customer service department is recommended after approximately 4,000 operating hours.	

Presented by:





Magellan[®] iPAP

The intelligent discoverer on the way to restful sleep.

MAP

The invisible becomes visible ...

On his voyages Fernando Magellan gathered new experiences and discovered hitherto unknown routes. He was the first seafarer to circumnavigate the globe. His verifiable discoveries led to a change in our understanding of the world: the world is not a flat disc but a ball.



therapy for obstructive sleep apnea collects and interprets information about breathing. Physician and patient get a detailed view into the efficiency and quality of the therapy and the correct functioning of the device. Magellan® iPAP can also be used for standardized titration and/or portable therapy control and thus contributes to simplifying the procedures in the sleep laboratory...

...and changes the world.



Ensure quality, simplify processes and profit from it...

... in titration.

Magellan measures the respiratory flow with high pneumotachographic quality – breath by breath – and without the need of an awkward sensor under the nasal mask. With Magellan therefore titration is most easy in terms of application, irrespective of the location and comfortable for the patient. Magellan records the flow signals and analyses them with regard to respiratory events. The ideal therapeutic pressure is determined on this basis and can be transmitted to other nCPAP therapy systems provided that these show a low pressure variation.

Magellan interprets breathing while being asleep in a standardised way. Given the reproducible work of engineering rules, the results can be checked at any time. Physician and sleep lab gain valuable time that can be used for the initial diagnosis.

... in therapy.

As regards the choice of mask and respiratory therapy accessories, the physician and sleep lab staff can fall back on the entire range available in the market. The individual requirements of the patient can be fully met. The therapeutic system does not force any compromises. Should a change in mask or therapeutic accessories be indicated, an additional visit to the sleep lab to adjust the device is not required.

... in therapy control.

Magellan saves the raw data of the last therapeutic night. Each respiratory event is documented. On control consultations the patient brings along his Magellan therapy device. Reading the saved data and analysing it with LOGSoft® suffice to check and comprehend the reliable and successful course of therapy over the past 1 to 160 days. The data gives information about both the quality of the therapy and the functioning of the device, too.

Magellan also identifies and shows leakages. Such objective basis allows for evaluating the correct functioning of the respiratory therapy mask. To recommend the right mask for a patient will be much easier.

Regular breathing, good sleep?

Magellan is the only iPAP system to recognise and document regular breathing in addition to apneas, hypopneas, snoring and flow limitations. Regular breathing may be indicating the stage of NREM sleep and may help to evaluate the patient's quality of sleep while being under therapy. This greatly supports the physician in evaluating the therapeutic efficiency.



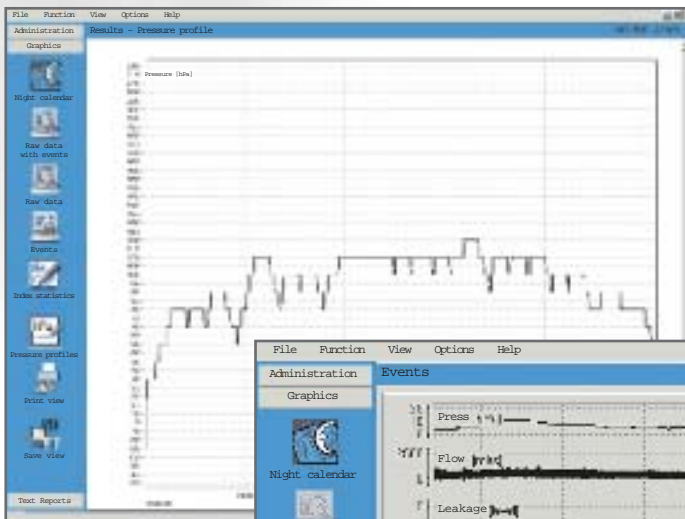
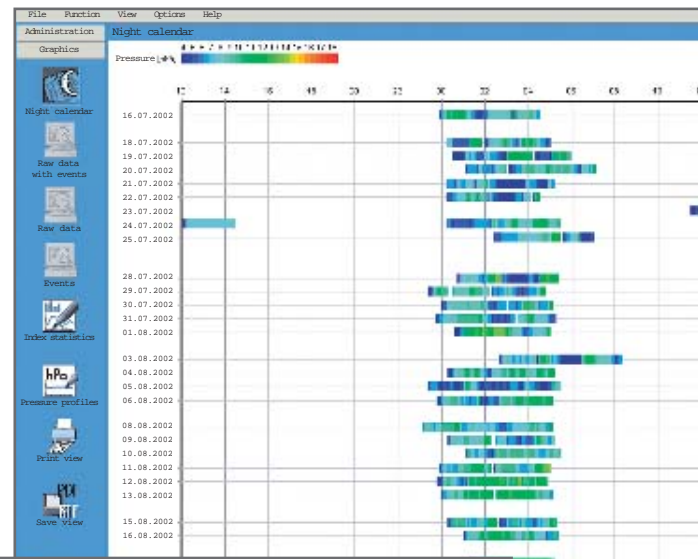
LOGSoft® - the encyclopedia of nocturnal breathing

With LOGSoft® the user receives a software tool that reads and interprets the data stored in Magellan. LOGSoft® presents the raw flow data of the last therapy night as well as all respiratory events in congenial graphics and tables. The compliance is portrayed graphically in a night calendar. All pressure changes of Magellan can be checked and comprehended at any time.

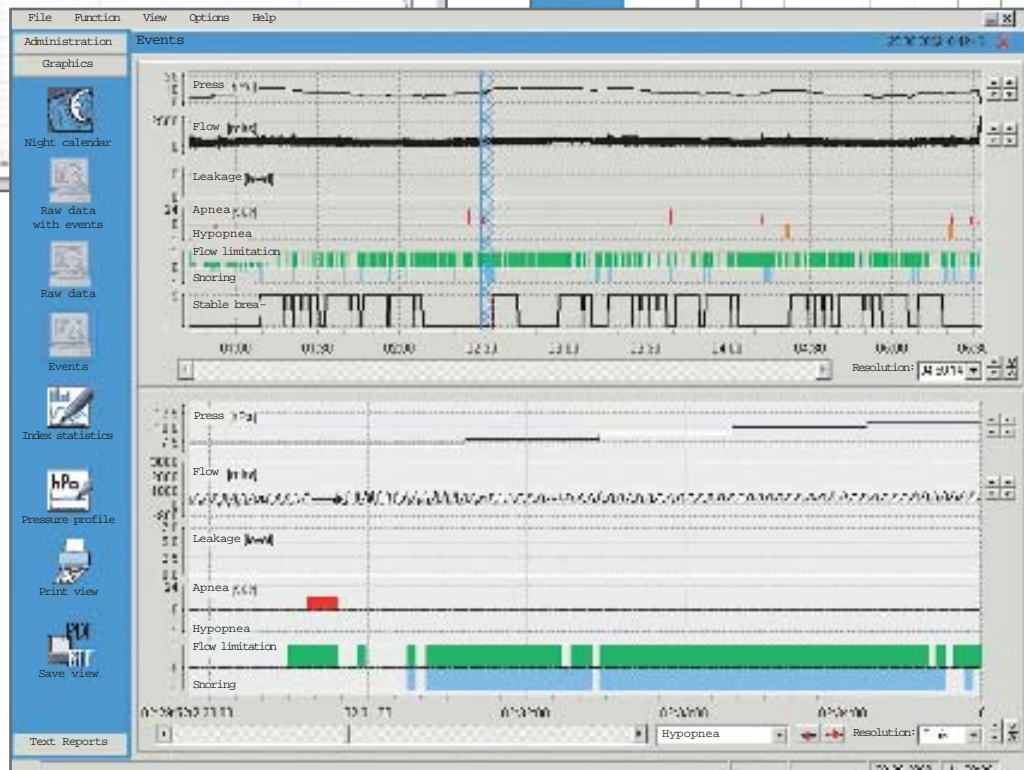
The simple user interface of LOGSoft® consistently follows the Windows® philosophy. An intuitive tool bar gives access to all the information required for titration evaluation, therapy control and/or as the basis for a consultation. An integrated patient database serves for administering and organising the according data and relieves physician and the sleep lab staff in their routine administrative tasks.

For information exchange with colleagues all relevant results can be imported and/or exported in a universally readable digital format (PDF).

Night calendar



Graphical representation (statistics)



Signal side with respiratory events from a therapy night (raw data)