

Lebenserhaltende Medizintechnik

# elisa 600

Entry to the premium class!

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Homecare Pneumology Neonatology Anaesthesia INTENSIVE CARE VENTILATION Sleep Diagnostics Service Patient Support

# Entry to the premium class!

Medical advance, varying patient disease patterns and changing medical focus of the hospitals have impact on the required ventilation modes and diagnostic possibilities.

elisa 600 enables entry to the premium class of modern ventilators with the highest quality of ventilation and extensive measurements. In the balance between financial investment and possible future developments the elisa 600 is the innovative ventilation platform for now and in the future.

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elisa 600 intensive ventilator

Invasive and non-invasive ventilation for adults and children with a weight of more than 3,5 kg.



#### Eventmanager

Especially under the stress of critical ventilation situations, a lot of comprehensive and exact information does not reach the respective decision maker. Necessary consequences for diagnosis and therapy are difficult to deduce or be of use during the ward round. The elisa 600 Eventmanager enables easy communication and reproduction of critical situations. When activated the actual respiration display for the last 15 seconds and the next 30 seconds are stored as a video in the trends. Hence clinical abnormalities can be clearly communicated and evaluated without loss. In addition the generated films can be stored on a USM data storage medium for lectures or scientific work.



#### Valve bar

One patient is done, the next one is waiting: Large numbers of patients and high workloads are part of everyday clinical reality. A dependable and practical hygiene concept can speed things up.

Thanks to the valve bar of the elisa 600 patient-side connections can be quickly replaced, effectively preventing cross-contamination. Highly durable long-lived materials guarantee the device's functionality even under the most demanding conditions such as mechanical impact and repeated autoclaving.

That in turn benefits, patients, staff, and budget alike: The expiration sensors no longer need to be calibrated and the costly replacement of disposable sensors has been eliminated, which saves time and ensures economical reuse of parts.





#### Easy Access Bar

The Easy Access Bar of the elisa 600 intensive care ventilator lets you make the desired settings with accuracy and ease, even in stressful situations. The touchscreen operation gives you intuitively understandable and unmistakable feedback on the value settings. Since all numerical values and setting parameters are always arranged in the same location, operation is an easy routine that is not error-prone in high-stress situations. The absence of conventional control knobs makes operation even easier. The entire surface can be disinfected, allowing for hygienic use with minimal work effort.

### Simply smart!

S			м
MV e	OFF	2,2	15,0
VT e	100	185	600
PEAK mbar	OFF	15	25
PEEP mbar	OFF	5	-
RR /min	6	12	50
02 %	18	21	26
etCO2	30	-	60

Time is a scarce resource in clinical settings. The increasing workload, frequent critical situations, but also the regular work routines represent enormous challenges for medical personnel. The cumbersome use of complicated devices creates additional problems and also can be a source of error.

High time for innovative technology that clearly displays the required information and offers a structured overview at all times. Simply smart!

Weaning screen							
RSBI	-	105	110				
P0.1	-3,0	4,3	•	mbar			
MIP	20,0	23	•	mbar			
Vt sp.	300	329	550	mi			
F sp.	11	14	30	/min			
etCO2	31	34	45	mmHg			
SP02	•	-	•	%			



#### Instant View Technology

The Instant View Technology lets you intuitively understand a patient's situation, with immediate display of any trends and necessary interventions. Discrepancies are visible right away without having to read individual measurement values.



elisa 600

## Simply safe!



Safe handling means far more than intelligent alarm systems. Six redundant high-performance processors continuously monitor the technical function of the intensive care ventilator. They guarantee that the life-saving ventilation of the patient continues to work dependably.

Even the failure or inadvertent removal of an operating screen has no impact on continuous ventilation.



#### Power management

State-of-the-art power management ensures a safe energy supply even in cases of power failure, voltage fluctuations or lengthy intensive care transports. The intelligent control of the power supply prevents memory effects and makes laborious battery maintenance and complex charging strategies superfluous.



#### Intelligent Acoustic Alarm system

The Intelligent Acoustic Alarm system automatically adjusts the volume of the alarm to the current noise level of the environment. Together with the intelligent alarm management, this ensures that the necessary alarms are triggered safely and with as little stress as possible, around the clock.



#### FiO<sub>2</sub> monitoring

Modern procedures allow for unobtrusive  $FiO_2$  monitoring without any user involvement. There is no more need for cumbersome calibration or changes of oxygen sensors.

## Simply always up to date

Manifold possibilities and upgrade options enable the required adjustment to current and future needs thereby preventing the limitations of aging ventilation technologies.



#### PEEPfinder™

It all starts with the right positive end-expiratory pressure. Numerous studies have documented the need for individual PEEP settings to avoid alveolar complications and improve oxygenation. However, in practical terms, the determination of the optimal end-expiratory pressure is usually complex, involved and frequently even associated with complications. With PEEPfinder<sup>™</sup>, the determination of the lower inflection point is as easy as setting the respiratory rate.

Thanks to its state-of-the-art sensors and highresolution sampling rate, elisa 600 contains the necessary algorithms for the reliable determination of the lower inflection point, and accordingly, the necessary PEEP. The simple display allows for the verifiable review of measurement values and PEEP settings that are not subject to interpretation.



#### Weaninganalyzer™

The routine application of weaning protocols has been unsuccessful for practical reasons so far. The process takes a lot of time, a multitude of parameters must be recorded, and the final assessment of the results remains difficult. The new intensive care ventilator elisa 600 puts weaning on a solid footing.

The device combines patient results from structured clinical analysis with real-time data, allowing for the reliable and simple performance of daily weaning protocols and their dependable assessment. The Weaninganalyzer<sup>TM</sup> accurately determines a patient's status in the weaning process and generates a dependable prognosis for their readiness for extubation as the best prevention of complications caused by unnecessary long stays on the ventilator.



#### Loop package

Configurable loops complete with references offer the basis for differentiated evaluation and deduction of therapy decisions.



#### Display option

Not only in the case of multi-resistant bacteria or in intensive-burn wards an additional display unit allows the easy, comfortable and comprehensive operation outside or if required inside the patient's room.



#### Assist comfort package

The high resolution additional sensors allow diagnostic and therapeutic possibilities through abdominal pressure measurement or automatic cuff-control and blockage of tubes and tracheal cannula. The integrated sensor washing option is the requirement for a valid measurement and display of the bedside results.



#### Ultrasonic Nebulization

Medical aerosol delivery by ultrasonic nebulization is considered the gold standard today. Modern ultrasound technology does not affect ventilation therapy, is almost noiseless and the medication can be refilled during operation.

The nebulization is synchronized with the patient's inspiration. Therefore, our technology considerably reduces the amount of medication used without compromising treatment efficiency.

By determining the appropriate particle size, users can define the distribution and, consequently, target aerosol deposition to specific areas. The integrated solution offered by elisa 600 allows direct control from the intensive care ventilator and does not require any manual devices.





#### CO<sub>2</sub> package

Main or side stream sensors complete the finemeshed monitoring of ventilated patients in routine use as well as in emergency situations.



#### Hygiene management

Our fully integrated hygiene management helps you to improve and to document your hygiene processes and related change intervals.



#### NIV package

Special algorithms, adjustable bias flow, optimized trigger technologies and the comprehensive leakage compensation remove the necessity for an additional NIV ventilator. The high flow module included enables the CPAP therapy to be continued after extubation or in the transition to nasal CPAP.

## Platform Development path

Heinen + Löwenstein has developed and manufactured user friendly solutions for breathing therapy and intensive ventilation for more than 30 years. Worldwide we belong to the technologically leading suppliers in this field. Our most important aims are safety, comfort, optimal treatment results and easy operation of the equipment. The spectrum of our technologies includes all of the current ventilation techniques as well as equipment for all areas of operation.

elisa and 600 stand for a new generation of modern intensive ventilators with high computer performance for diagnosis, analysis, sophisticated user concept, far-reaching hygiene approach for a decrease in nosocomial infections and the flexibility of a ventilation platform with a wide package of optional enhancements for now and the future.



The images contain optional accessories which can

be ordered in addition.



elia alT

elia alT was conceived as a lung monitor for continual observation of the lung function of intensive ventilated patients. The adaptive Impedance Tomography enables the complete spectrum of non-invasive lung monitoring of ventilator integrated impedance tomography by a simple interface with almost every intensive ventilator.

State-of-the-art EIT-Technology with high resolution electrodes woven in a textile belt, low-noise signal processing, high data rates and easy operation enable the effect of ventilation adjustments to be evaluated and adapted in real-time. elia alT is devised as a building block system and can at any time be upgraded to a modern premium class intensive ventilator. You can benefit from the extensive possibilities of alT monitoring even if at present you have no requirement for a new intensive ventilator.





### elisa 600 elisa 800 elisa 800 VIT

VIT® - ventilator integrated tomography	in combination with elia alT	Option	integrated
Integrated nebulizer	Option	integrated	integrated
Assist Comfort Package	Option	integrated	integrated
Second display	-	Option	Option
NIV-Package	Option	integrated	integrated
ACV -Automatic Control Ventilation	Option	integrated	integrated
Loop-Package	Option	integrated	integrated
Weaninganalyzer®	Option	integrated	integrated
PEEPfinder®	Option	integrated	integrated
CO <sub>2</sub> -Package	Option	Integrated (without sensor)	Integrated (without sensor)

Your distribution partner:



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