



p-elisa800-e Stand: 05/2014

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# Elisa 800

## Rediscover ventilation!

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

“There is no justification for complexity **when things can be simple.**”

(based on Leonardo Da Vinci)

Until recently, there was a gap between scientific evidence and clinical practice in intensive care ventilation. Inadequate technical options and nontransparent evaluation of measurement results frequently stood in the way of the desired treatment. In many cases, the available procedures simply were not sufficient for broad, yet dependable use.

Drawing on more than 25 years of experience, Heinen + Löwenstein is now making the impossible a reality: Intensive care ventilation - simple, clear and verifiable. The simple solution adds safety, reduces training needs, and allows for the broad use of ventilation strategies. It is economical, minimizes operating errors, and gives you more time to focus on the essential.

elisa 800 stands for simplifying complexity.



# Simply intelligent!

The basic principle is simple enough—balance the interaction of man and machine. It has guided the design of the new solutions with elisa 800.



## 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 the PEEPfinder®, the determination of the optimal PEEP range point is as easy as setting the respiratory rate.

Thanks to its state-of-the-art sensors and high-resolution sampling rate, elisa 800 contains the necessary algorithms for the reliable determination of the inflection points, and accordingly, the necessary PEEP. The simple display allows for the verifiable review of measurement values and transparent PEEP settings.



## 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 800 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® 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.





# Simply smart!

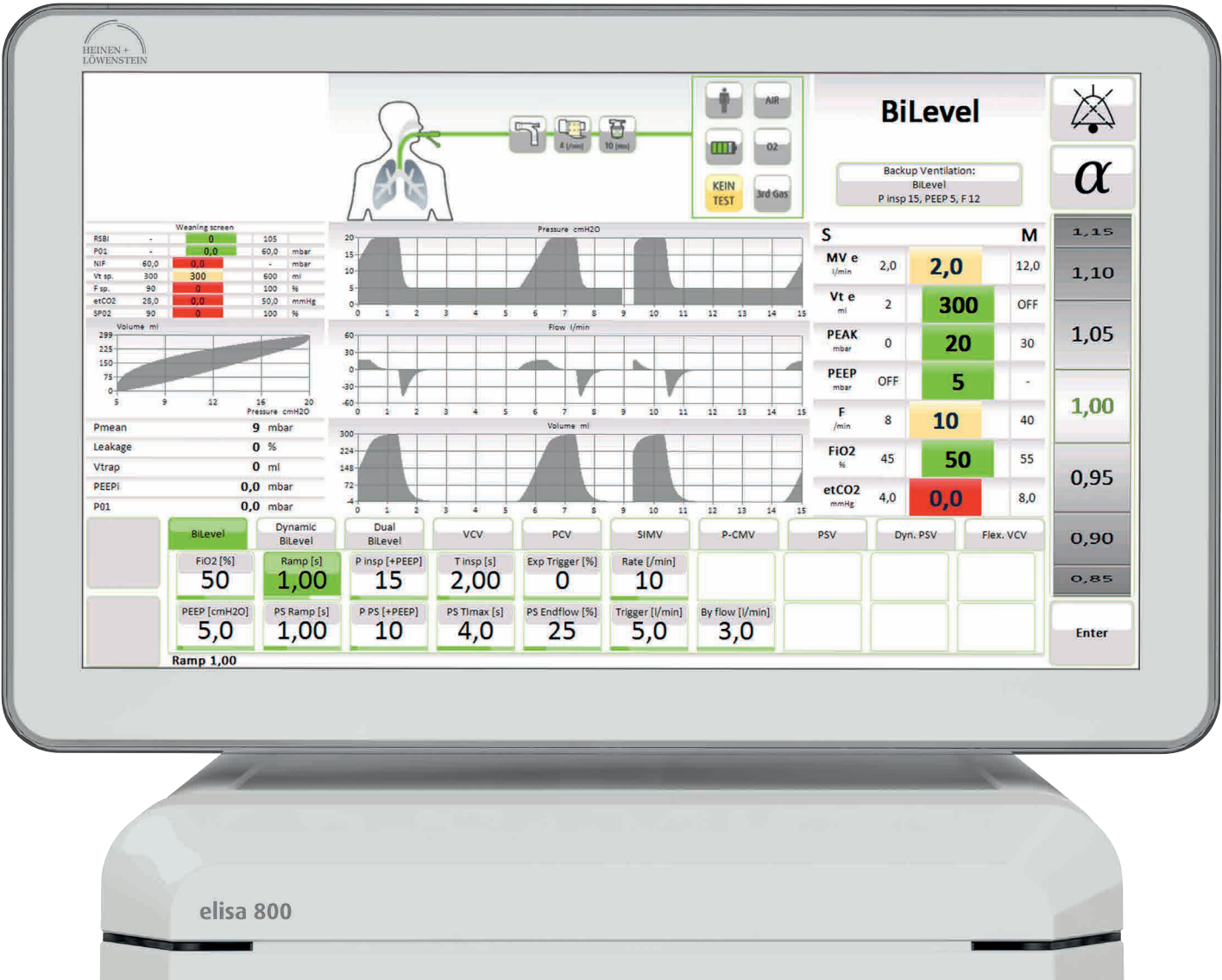
Time is a scarce resource in clinical settings. The increasing workload, frequent critical situations, but also the regular work routines represent enormous challenges for medical personnel. The cumbersome use of complicated devices creates addition-

al 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!

The images contains optional accessories which can be ordered in addition. (Please inquire further information.)

S			M
MV e l/min	2,0	2,0	12,0
Vt e ml	2	300	OFF
PEAK mbar	0	20	30
PEEP mbar	OFF	5	-
F /min	8	10	40
FiO2 %	45	50	55
etCO2 mmHg	4,0	0,0	8,0

Weaning screen				
RSBI	-	0	105	
P01	-	0,0	60,0	mbar
NIF	60,0	0,0	-	mbar
Vt sp.	300	300	600	ml
F sp.	90	0	100	%
etCO2	28,0	0,0	50,0	mmHg
SP02	90	0	100	%

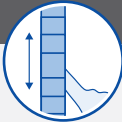


1,15
1,10
1,05
1,00
0,95
0,90
0,85



## 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.



## Easy Access Bar

The Easy Access Bar of the elisa 800 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 practical!

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.



## Valve bar

Thanks to the valve bar of the elisa 800, 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.



## Intelligent Acoustic Alarmsystem

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.

# 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.



## Powermanagement

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.



## FIO<sub>2</sub> monitoring

Modern procedures allow for unobtrusive FIO<sub>2</sub> monitoring without any user involvement. There is no more need for cumbersome calibration or changes of oxygen sensors.

# Simply flexible!

The hardware of the elisa 800 intensive care ventilator is a living platform that remains open for future technological advances and offers many options for expansion. Thanks to regular

software updates, the system remains consistently optimized for practical use.

We can't predict how you will ventilate patients in five to ten years, but elisa 800 is designed to accommodate the technical and application-related requirements of the future. The flexible system architecture permits easy integration of future requirements along with medical and technical developments—flexible, expandable, ready for the future.

- + Powerful hardware
- + Modular software concept
- + Expandable ventilation architecture
- + Versatile interfaces
- + Versatile option boxes
- + Intelligent cable management
- + Intelligent acoustic alarm system
- + State-of-the-art power management
- + Light sensor for day-night adjustment
- + Heliox-ready
- + Integrated ventilation protocol
- + Electrical impedance tomography



## 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 800 allows direct control from the intensive care respirator and does not require any manual devices.

