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# **LUISA** Life Supporting Ventilation with High Flow Oxygen Therapy



**IR** IN PARTNERSHIP WITH





## PARTNERSHIP FOR BETTER PATIENT CARE

With over 60 years combined experience in respiratory care, Movair and Lowenstein Medical have partnered to deliver high-quality ventilation to the United States. The Luisa **non-invasive/invasive ventilator** with High Flow Therapy is a 3<sup>rd</sup> generation life supporting ventilator that represents the highest standards in German and U.S. product development, engineering, and manufacturing.



Movair, formerly International Biophysics Corporation, innovator of the AffloVest has been in the cardiac surgery and respiratory market for 30 years. Based in Austin, Texas, Movair advances life-empowering respiratory technologies that help people breath better and live better.

### LÖWENSTEIN medical

Lowenstein Medical is a global market leader in respiratory care. They have been providing innovative solutions that improve the care of patients with over 30 years designing and manufacturing high performance ventilators used by patients ranging from neonatal to the elderly in over 130 countries worldwide.

## PROVIDING LIFE SUPPORT FOR **30 YEARS**.



# LUISA<sup>®</sup> AT A GLANCE

The Luisa from Movair and Lowenstein Medical is an advanced, easy-to-use, portable and compact home ventilator. Luisa has been globally recognized for multiple design excellence awards for intuitive, simplified everyday use.<sup>1</sup>

Movair is the exclusive sales, clinical and service partner for Luisa in the U.S.A.

- Targeted tidal volume, volume-assured pressure support, auto EPAP (TTV-VAPS-AE)
- High Flow Therapy in all circuit systems
- $\bullet$  100 3000 mL V\_{\_{\rm T}} without additional flow sensor
- No adapters needed
- 10" angled touchscreen
- Ease of Use programming
- 2nd alarm language
- Lightweight at ~ 8 lbs.
- Vertical or horizontal position functionality
- SpO<sub>2</sub> and FiO<sub>2</sub> monitoring capabilities
- Up to 18 hours battery life<sup>2</sup>
- Customized patient downloadable reporting



# HIGH FLOW THERAPY FOR YOUR VENTILATOR PATIENTS

The Luisa, with High Flow Therapy (HFT), is a home ventilator that offers all the potential benefits of HFT for patients that meet the clinical requirements for home ventilation. High Flow Therapy can

deliver a high flow blend of air and oxygen, through a high-flow nasal cannula, which can improve oxygenation and decrease the workload of breathing in a wide array of patient populations.<sup>3</sup>

High Flow Therapy has been used in critical care, emergency departments, and is **now available to the ventilator patient at home.** 

High Flow Therapy provides a flow rate that meets or exceeds a patient's inspiratory flow demand. This high flow rate can reduce the work of breathing and more closely match inspiratory demand through adjustable oxygen delivery and flow dependent clearance of carbon dioxide.<sup>4,5</sup>



Easy-to-use High Flow Therapy in Luisa has the potential to help manage nocturnally ventilated patients during the day with a less obtrusive oxygen flow delivery method that can potentially lead to:

- Enhanced oxygenation compared to conventional low-flow oxygenation<sup>4</sup>
- Improved work of breathing<sup>5</sup>
- Better secretion clearance<sup>5</sup>
- Increase in activities of daily living like eating, drinking and talking<sup>5</sup>
- Superior comfort and less anxiety or claustrophobia which could lead to better compliance<sup>6</sup>

The Luisa provides the flexibility of High Flow Therapy, for your patients that meet clinical requirements for home ventilation, in all circuits with a flow range of 5-60 lpm.

Luisa offers all the benefits of High Flow Therapy for your ventilator patients in one device at home.



## **OPTIMAL CARE**

#### TAILORED THERAPY

Luisa provides ventilator support and utilizes all standard volume, pressure and mouthpiece ventilation modes with the added benefit of High Flow Therapy. Ventilator modes include **Luisa's targeted tidal volume, volume-assured pressure support, auto EPAP (TTV-VAPS-AE)**.

#### PORTABILITY

Internal and external batteries offer long-lasting battery life with up to 18 hours of use<sup>2</sup>. Luisa is a lightweight and portable ventilator that offers two position functionality for flexibility of use at bedside, in an easy-to-carry durable bag or mounted on a wheelchair.



#### EASE OF USE

The Luisa with High Flow Therapy is designed for simple set-up and operation. A large, angled and rotatable 10-inch touchscreen provides an easy to view screen when programming the device through its' intuitive menu. It also provides easy visibility for patients from many angles while in use. The Luisa is a multi-purpose ventilator that does not require any adapters for different circuits.

#### PERSONALIZED REPORTS

Device connectivity allows for personalized therapy data downloads. The customized reports provide essential information to manage your respiratory patients and ensure they are maximizing their therapy.



## SERVICE SIMPLIFIED

Luisa with High Flow Therapy provides long term care with easy serviceability. Routine patient maintenance consisting of only filter changes and a device wipe down provides uncomplicated upkeep.

With simple, routine maintenance and no adapters required between circuits, the Luisa provides clinicians and patients peace of mind with an all-encompassing system in a compact, home ventilator with the added benefit of High Flow Therapy.





## LUISA<sup>®</sup> OVERVIEW

- High Flow Therapy all circuit systems
- Lightweight ~ 8 lbs.
- Uncomplicated **no adapters, intuitive operation**
- Battery run time
   up to 18 hours<sup>2</sup>
- Monitoring
   FiO<sub>2</sub> and SpO<sub>2</sub> measurement
- Safety
   alarm displayed in two languages
- Display 10" angled touchscreen
- Responsive adjustable target volume speed
- Connectivity
   customized patient download reports
- Functionality
   100 3000 mL V<sub>τ</sub> without additional flow sensor
- HCPCS codes
   E0465/E0466 Invasive or Noninvasive home ventilator
- Positioning vertical or horizontal; circuit orientation options (left or right side)



### **SPECIFICATIONS**

Positions to operate device	2	Trigger expiratory	5% - 95% of peak flow
Number of programs/profiles	4	Target volume	100 - 3000 mL
Weight (lbs.)	8.3 lbs.	Target volume speed	Variable, with three selectable values Max. 30 l/min
W x H x D	11.8 x 5.1 x 8.2 in.		
Display size	10" angled touchscreen	Low pressure $O_2$ inlet	
Min. V <sub><math>\tau</math></sub> of patient	100 mL	FiO <sub>2</sub> measurement	Integrated, optional
		Battery time	Up to 18 hours <sup>2</sup>
Circuits (no adapters)	<ul> <li>Leakage</li> <li>Single circuit with valve</li> <li>Double circuit</li> </ul>	Internal battery service interval	4 years or 500 charge cycles
	TTV-VAPS-AE, HFT, S, ST, T, PSV, aPCV, PCV, P-SIMV,	Alarm level	59 - 87 dB(A) (depending on priority level)
Modes	V-SIMV, aVCV, VCV, MPVp, MPVv, CPAP	Noise level, dBA	Measurement according to ISO 80601-2-72 • at $V_T \ge 500$ mL: 38,5 dB(A) • at $V_T \ge 150$ mL: 37 dB(A)
Modes with target volume	TTV-VAPS-AE, S, T, ST, PSV, aPCV, PCV		
IPAP pressure leakage circuits	4 - 50 cmH₂O	Max. flow at 20 cm $H_2O$	>220 l/min
IPAP pressure valve circuits	4 - 60 cmH <sub>2</sub> O	Alarm mute	120 sec
Ti min	0.5 sec	Boot time	<ul> <li>12 sec when on battery</li> <li>1 sec when plugged in</li> </ul>
Ti max	max 4.0 sec		<ul><li> 30 days detailed</li><li> 365 days statistics</li></ul>
Frequency 2 - 60 bpm		Data storage	
Trigger inspiratory	Auto, 1 - 10	Connectivity	Downloadable reports via USB

#### For more information, please visit movair.com/LUISA

#### REFERENCES

- 1. iF Design Award for Design Excellence 2021 and Red Dot Award for Product Design 2021
  2. Utilizing 6 hour internal battery plus two optional external batteries at 6 hours each.
  3. Dysart, K. et al. Research in High Flow Therapy: Mechanisms of Action. Respiratory Medicine. 2009. 103(10):1400-5
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- 6. Masclans, J. et al. The Role of High-Flow Oxygen Therapy in Acute Respiratory Failure. Medicina Intensiva. 2015; 39:505-515.



CE Marked as Class IIb medical device by TÜV Rheinland LGA Products GmbH

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