



HAMILTON-C1

Minimum size for maximum performance



HAMILTON
MEDICAL
Intelligent Ventilation since 1983



We live for ventilation technology

We live for ventilation technology. Technology that helps caregivers improve the lives of their critically ill patients. We believe that innovation is essential to meet the demands of critical care. To us, innovation is about realizing visionary new ideas and continuously improving existing products, always maintaining the focus on safe, individualized ventilation, as well as ease of use.

We learn from our customers and from multi-disciplinary experts. And we invest in long-term research and development. We develop Intelligent Ventilation solutions: devices and consumables for the ventilation of all critically ill patients – from neonates to adults.

A handwritten signature in blue ink, reading "Jens Hallek".

Jens Hallek
CEO
Hamilton Medical AG

A handwritten signature in blue ink, reading "Bob Hamilton".

Bob Hamilton
CEO
Hamilton Medical, Inc.

Meet the HAMILTON-C1

The HAMILTON-C1 is a versatile and feature-rich ventilator packaged in a compact size. It is the ideal companion for all patient groups, including neonates. The HAMILTON-C1 adapts effortlessly to a variety of different settings, such as the intensive care unit, emergency ward, recovery room or intermediate care, as well as long-term acute care facilities and during intrahospital transport.

- ✓ Adult, pediatric, and neonatal ventilation
- ✓ Noninvasive ventilation and integrated high flow oxygen therapy
- ✓ High-performance turbine and battery
- ✓ Individualized, lung-protective ventilation modes ASV® and INTELLiVENT®-ASV
- ✓ CPR ventilation
- ✓ Digital solutions for respiratory care: Hamilton Connect Module and App



Compact and convenient for transport

The high-performance turbine enables the HAMILTON-C1 mechanical ventilator to be completely independent from compressed air. Its integrated high-capacity battery allows you to ventilate your patients during intrahospital transport and mobilization, without needing an external power source. The compact and lightweight design makes handling easier.





Ease of use

In close cooperation with users and ventilation experts, our engineers have designed the user interface to be particularly intuitive. Switching between the HAMILTON-C1 and all other Hamilton Medical ventilators is easy, because they are all operated according to the same principles.

The Ventilation Cockpit on the HAMILTON-C1 consolidates the monitoring data and displays it as advanced graphics. These provide a quick overview of the patient's current ventilation status and provide a reliable basis for therapy decisions.

With the Hamilton Connect App on your smartphone, you can take advantage of the Live View to keep an eye on all essential parameters and ventilation data, and review them even when you are not in front of the ventilator screen.

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Small but mighty! Despite its compact size, the HAMILTON-C1 is a fully featured ventilator for use in almost any environment.

Jesko Mertha, Group Leader,
Clinic for Intensive Care Medicine
Cantonal Hospital St. Gallen, St. Gallen,
Switzerland



The Ventilation Cockpit

1 Main monitoring parameters

All of the main monitoring parameters at a glance. The large characters allow you to see them even from a distance.

2 Dynamic Lung

One quick look shows you tidal volume, lung compliance, patient triggering, and resistance in real-time. The lungs expand and contract in synchrony with the actual breaths.

3 Vent Status

The Vent Status panel displays six parameters related to the patient's dependence on the ventilator. When all values are in the weaning zone, the panel is framed in green, indicating that spontaneous breathing trials or extubation can be considered.

4 Direct access to main controls

Access and adjust the most important controls for the current mode directly on the main display.



For use in any hospital situation, from neonates to adults

In the intensive care unit

The HAMILTON-C1 offers the performance of a high-end ICU ventilator in a compact size:

- ✓ State-of-the-art and advanced ventilation modes, including ASV and INTELLiVENT-ASV
- ✓ Noninvasive ventilation and integrated high flow oxygen therapy
- ✓ Advanced lung-protective features and options

During intrahospital transport and for mobilization

The HAMILTON-C1 is a reliable companion for intrahospital transport and mobilization:

- ✓ High-performance turbine, battery operation, and compact size
- ✓ State-of-the-art ventilation modes appropriate for early mobilization of all patient populations
- ✓ Wireless connectivity with the Hamilton Connect Module

In the neonatal intensive care unit

The HAMILTON-C1 can provide continuity of care for neonatal patients by means of dedicated modes and features:

- ✓ Noninvasive ventilation modes and therapies developed especially for neonatal patients (synchronized noninvasive ventilation, demand-flow nCPAP modes, Volume Support mode, and high flow oxygen therapy)
- ✓ Invasive ventilation modes developed for neonatal patients
- ✓ Robust proximal sensor to provide accurate flow measurement
- ✓ Single-use consumables that may help in controlling infections

For long-term acute care

The HAMILTON-C1 can eliminate the need to use multiple ventilators for patients requiring long-term respiratory support:

- ✓ Portability, making it suitable for mobilization
- ✓ Different modes and therapies in one device (invasive ventilation modes including ASV and INTELLiVENT-ASV, NIV, and high flow oxygen therapy)
- ✓ The Speak Valve option gives tracheostomized patients a voice, and allows them to swallow even while receiving respiratory support from the ventilator



Adult, pediatric, and neonatal ventilation

is provided. For neonatal patients, a specially designed neonatal proximal flow sensor is used. The tidal volume range goes down to as low as 2 ml.



High-performance turbine

enables the HAMILTON-C1 to be completely independent from compressed air. This reduces weight and saves space.



INTELLiVENT-ASV, your bedside assistant

is an advanced ventilation mode based on ASV. The clinician defines the clinical goal for PetCO₂ and SpO₂. INTELLiVENT-ASV then adjusts CO₂ elimination and oxygenation, and keeps the patient within the predefined ranges. Quick Wean supports the clinician in weaning patients from mechanical ventilation.



High-performance noninvasive ventilation (NIV)

is enabled by the ventilator's integrated high-performance turbine and peak flow rate of up to 260 l/min. Optimal flow delivery is ensured even in the event of large leaks.



Integrated high flow oxygen therapy

can be applied using the same device and breathing circuit, simply by changing the patient interface. With the optional integrated high flow oxygen therapy, the ventilator offers you a range of ventilation and therapy options in one device.



Hamilton Connect Module

provides wireless and wired connectivity protected by state-of-the-art security. It also enables connection with the Hamilton Connect App.

Features and options



Integrated pneumatic and optional Aerogen^s nebulizer



Pulse oximetry
(SpO₂ and pulse measurement)



Leak compensation for NIV and
invasive ventilation



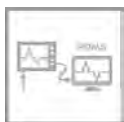
Compatible with conventional
speaking valves



CPR ventilation



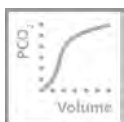
nCPAP modes



Serial interface for connection to
PDMS or patient monitors



Hamilton Connect App



Mainstream (volumetric) and
sidestream capnography



Remote access to HAMILTON-H900
controls and status

From the ventilation specialist

E-learning

Hamilton Medical College provides free and open e-learning on mechanical ventilation and ventilators.

Join at: www.hamilton-medical.com/elearning.

Universal ventilator consumables

Our accessories and consumables are specially developed for the highest possible patient safety and ease of use. Choose between reusable and disposable parts according to your institutional policies.

Peripheral devices

Our ventilation portfolio includes an active humidifier, the HAMILTON-H900, as well as the automatic cuff pressure controller, IntelliCuff. Both devices may be used with all kinds of mechanical ventilators.





More information:
www.hamilton-c1.com



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The Hamilton Connect App is not intended to replace the real-time display of data on the ventilator. DO NOT USE the app to supplement or replace any part of the hospital's device monitoring. Specifications are subject to change without notice. Some features are options. Not all features/products are available in all markets. INTELLIVENT-ASV is not available in the US. For all proprietary trademarks (®) and third-party trademarks (§) used by Hamilton Medical AG see www.hamilton-medical.com/trademarks. © 2021 Hamilton Medical AG. All rights reserved.

HAMILTON-C1