

IMT.Innovations



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Who we are

MT Innovations, is a pioneering force in healthcare innovation. We specialize in developing advanced medical devices and components for licensing, empowering local manufacturers to deliver cutting-edge solutions and transform healthcare in their region.



Our Mission

We are dedicated to creating affordable and advanced medical devices for licensing. By expediting development timelines and reducing complexity, we enable our partners to bring life-saving solutions to market faster and more efficiently.

Efficient
Experienced
Smart

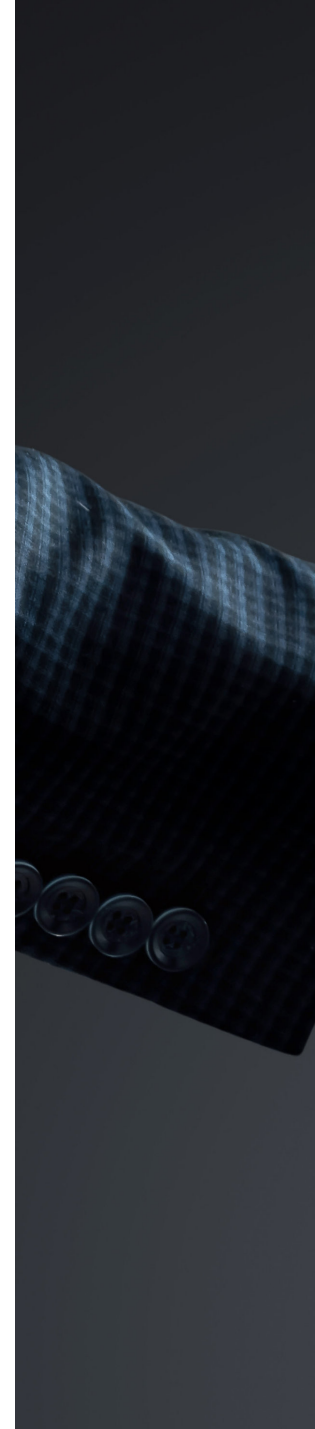




Our Expertise

IMT Innovations has more than thirty years of proven excellence in medical device innovation. We have collaborated with some of the world's leading and most renowned medical brands, supporting them in delivering groundbreaking solutions.

MedTech
Innovation
Partnership





Licensing Model

Partner with a Proven Leader in Medical Innovation

As a licensee, you secure your role as a local manufacturer and gain access to cutting edge ventilator technology, thereby empowering your community and healthcare system.

You will receive:

- **Manufacturing and Distribution Rights:** Build and distribute the ventilator in your region or country.
- **Access complete documentation** for design transfer and submission to local authorities or notified bodies to achieve the regulatory approvals.
- **Comprehensive Manufacturing Support:** Implement a franchise-like production system with pre-designed workflows, supply chain support, and operational training.

Manufacturing Rights
Regulatory Approvals
Production Support



The Project: box

Advanced, Affordable, and Adaptable Respiratory Care

The box ventilator redefines modern respiratory care by combining cutting edge technology with affordability. The box ventilator ensures superior performance while prioritizing ease and cost of production, maintenance, and operation. This makes the box ventilator an ideal solution for local manufacturing and sustainable healthcare systems.





Synchrony that makes breathing as easy as... well, breathing.

The box ventilator integrates fast, adaptive sensors to optimize patient-ventilator interaction. Its patented pneumatic design leads to faster target pressure, lower work of breathing, and superior cycling performance, optimizing synchrony and patient comfort.

The box is designed as a modular future proof system which easily allows enhancements in software and hardware for any use case.

Advanced
Affordable
Adaptable

The logo for 'box' is displayed in a stylized font. The letters 'b' and 'o' are white, while the 'x' is split into green and blue.A smaller version of the 'box' logo is located on the front panel of the device.

Specifications: box

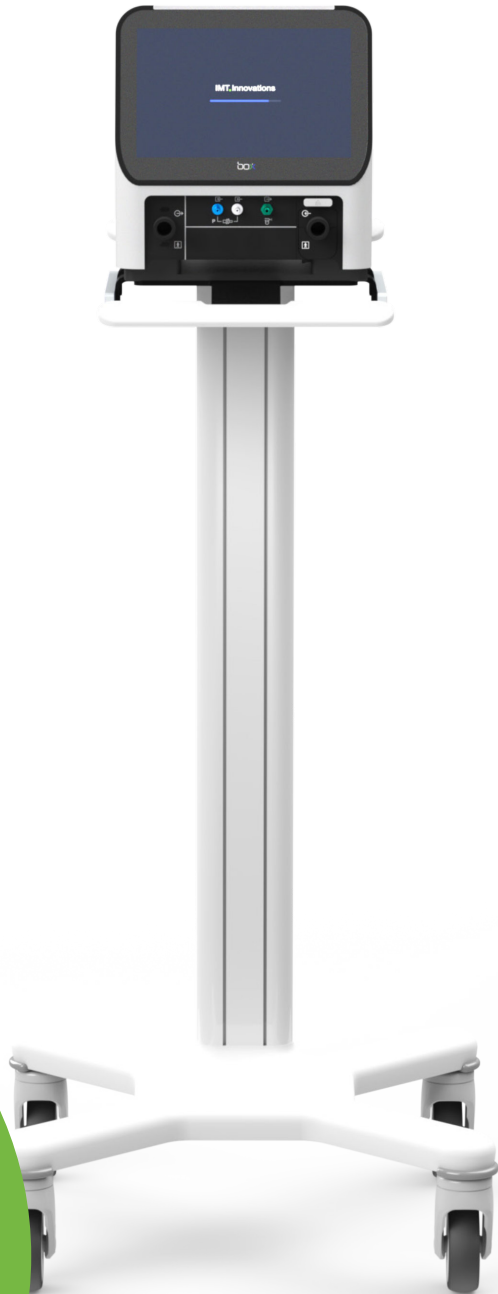
The box ventilator is equipped with advanced technology and boasts a user-friendly, touch-optimized interface.

It is designed to accommodate patients from pediatric to adult, making it suitable for intensive care, sub-acute, and long-term care environments. This versatile unit supports both invasive and non-invasive ventilation, as well as oxygen therapy, all within a single device.

Featuring a powerful turbine blower and a compact design, the box ventilator ensures ease of use and offers a battery life of up to eight hours, facilitating intra-hospital transport.

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User-friendly
Versatile
Compact design



Highlights at a glance

Adaptive Mode

Adaptive ventilation is optimized for lung-protective strategies, significantly reducing the need for manual adjustments.

Comfort Breath Technology

A patented, airflow-optimized, low-resistance lowers work of breathing and improves CO₂ clearance.

Automated Trigger

Frees patients from rigid trigger settings, enhancing synchronization and comfort.

Oxygen Therapy

Delivers oxygen to adult and pediatric patients at a flow rate of up to 80 L/min.

LungView

Provides a real-time graphical display of compliance, resistance, and spontaneous breathing.

WeanView

Presents various ventilation parameters to assess the patient's weaning status effectively.

Spontaneous Breathing Trial Feature

Executes automated breathing trials, aborting the process if the patient's condition deteriorates.

Circuit Choice

Offers dual and single-limb operations flexibility to meet diverse clinical needs.

Touch-Optimized User Interface

A graphical user interface and advanced graphics reduce the learning curve, making the device accessible for caregivers at all experience levels.

Features	
Peak inspiratory flow	> 280 L/min
Apnea Ventilation Mode	✓
Flow pattern	Decelerating, Square
Inspiratory trigger	Flow, Auto
Expiratory trigger	Manual, Auto
Rise time	Manual, Auto
Leakage compensation	✓
Touchscreen lock	✓
Oxygen Flush/Suction maneuver	✓
Expiration valve, reusable	✓
On-screen Instructions	✓
Alarm and EventLog	✓
Automatic system test during startup	✓
Circuit test	✓
Waveforms	
Pressure airway	✓
Flow	✓
Volume	✓
Trending and Maneuvers	
Parameter trending	1h to 30 days
Manual breath	✓
Inspiratory Hold	✓
Expiratory Hold	✓
NIF (Negative Inspiratory Force)	✓
P0.1 (Occlusion pressure)	✓
PEEPintrinsic	✓

Graphics	
LungView	✓
WeanVlew	✓
Adaptive TargetView	✓
Alarms	
Vt	✓
MV	✓
PPeak	✓
Apnea	✓
Various	
Single and Dual Limb operation	✓
Integrated pneumatic nebulizer	✓
Settings	
Plhsp, IPAP	2 – 100 mbar
PSupport	0 – 80 mbar
PEEP, EPAP	0 – 50 mbar
Flow trigger	1-10, Auto
Expiration trigger	5 – 90 %, Auto
Oxygen	21 – 100 %
Rate	1 – 100 bpm
Rise time	0 – 2000 ms, auto
TInsp, I-time	0.1 – 10 s
Flow (HFOT)	2 – 80 L/min

Interfaces, Connections	
RS232	✓
USB	✓
Nurse Call	✓
Connection protocols	HL7
Dimensions (w × h × d)	263 × 275 × 325 mm
Screen	10.1 inch Touchscreen
Resolution	1920 × 1080 pixels
Touchscreen	Capacitive, glass touchscreen
Battery time	4 h (8 h with additional battery pack)
Oxygen supply	Low and High pressure oxygen
Oxygen connectors	DISS, NIST
Weight	9.8 kg
Extension Module Slots	3
Protection class	IP22
Color	white
Acoustic power level	45 dBA
Power input DC	24 VDC
Power consumption	80 – 200 VA
Units	
Monitoring (Pressure)	mbar, cmH ₂ O
Pressure input	bar, psi
Height	cm, ft/inch
Weight	kg, lbs

Ventilation Modes			
Mode	Description	Invasive	Non-Invasive
Adaptive	Adaptive Mode	✓	–
PC–A/C	Pressure Controlled, Assist Control	✓	✓
CPAP/PS	Continuous Positive Airway Pressure, Pressure Support	✓	✓
PSV	Pressure Support Ventilation	✓	✓
S/T	Spontaneous/Timed	–	✓
VC–A/C	Volume Controlled, Assist Control	✓	–
PSV/VG	Pressure Support Ventilation with Volume Guarantee	✓	✓
PC–A/C/VG	Pressure Controlled, Assist Control with Volume Guarantee	✓	✓
HFOT	High Flow Oxygen Therapy	–	✓



Disclaimer:

The technical specifications provided for the box ventilator are preliminary and subject to change as the device is further developed and tested. Final specifications may vary based on ongoing engineering improvements, clinical evaluations, and compliance with regulatory requirements in different countries. Users and stakeholders are advised to consult updated documentation and adhere to local guidelines and restrictions applicable in their regions.

Take the next step

By partnering with IMT Innovations, you'll unlock a scalable opportunity while ensuring your community has access to critical, life-saving healthcare technology.



Contact

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Scalable Opportunity
Life-Saving Healthcare
Community Access

IMT.Innovations

