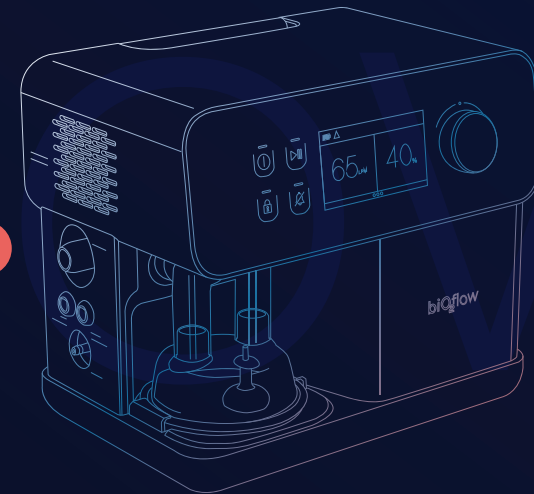


BIO₂FLOW

High Flow
Oxygen Therapy Device



Advanced Technology ●●●





INNOVATIVE MEDICAL TECHNOLOGIES

Leader in ventilation and respiratory equipment

Biosys has been producing innovative medical technologies since 2012, bringing together expert engineers and highly experienced field doctors. By identifying the needs of the sector, it creates next-generation solutions. Biosys continuously works to improve healthcare services worldwide and to make these services accessible to more people

Previously making a global impact with the Intensive Care Type Mechanical Ventilator Biyovent, providing a vital solution for patients with respiratory difficulties, Biosys continues to be a breath of fresh air with BiO2Flow, which provides high-flow oxygen therapy. Developed based on the field experiences of doctors and healthcare professionals, BiO2Flow is a revolutionary device for HFO (High-Flow Oxygen) therapy following a detailed preliminary research and design process.

Just as in the design of intensive care ventilators, Biosys, with its high level of knowledge, equipment, and experience, highlights the design and quality of the BiO2Flow device through the collaborative efforts of its R&D engineers. The BiO2Flow is manufactured at Biosys' advanced production technology facilities in Batman.



AT OPTIMAL LEVELS, **PREVENTIVE CARE & TREATMENT**

The BiO2Flow, which revolutionizes HFO therapy with its innovative features, also stands out with its sleek design and user-friendly interface. Its functionality emphasizes that it can be used not only in hospitals but also in home care situations without the need for healthcare professionals.

The high-flow oxygen therapy provided by BiO2Flow reduces the likelihood of patients needing intubation. Additionally, it enables treatment without the need for intensive care, allowing patients to be treated in less acute settings. Developed after extensive R&D processes and analysis of healthcare sector needs, the product allows oxygen therapy to be applied to patients at the desired levels.





HIGH FLOW EFFECTIVE THERAPY

Designed for Care Providers, Optimized for Patients

The BiO₂Flow is designed to adapt to patients with different therapy needs. Its unique flexibility is supported by various modes and precise adjustment features. It provides an advantage for patients to easily clear secretions.

The hardware and software features of BiO₂Flow, easily operated with a single button, enable its use in conditions such as respiratory failure, post-cardiac surgery, heart failure, bronchoscopy, and post-extubation. It can also be used in other situations requiring high FiO₂ levels.



Integrated Nebulizer



Precision FiO₂ Adjustment



Integrated Battery



Integrated Humidifier



Flow Rate up to 100 lpm



Single button press & start

biosys



WITH EMERGENCY MEASURES
COMPLETE SAFETY

biosysmed.com



ADVANCED CARE COMPREHENSIVE PRECAUTIONS

The BiO2Flow is developed to detect and alert potential issues in advance through its sensors and valves. As the safest high-flow oxygen therapy device in its class, BiO2Flow delivers high quality and safety simultaneously, having successfully passed all tests

- The pressure sensor system prevents leaks even during rapid pressure changes
- Double layer insulated heater
- Ventilating fan
- Sensors that instantly detect all potential malfunctions and an advanced alarm system for prompt alerts
- Exterior design with V₀ flame retardant class.



SINGLE DEVICE, **DUAL FUNCTION**

Pioneering in ventilation & respiratory equipment

Many external nebulizers are impractical due to their lack of portability, making it difficult to initiate therapy whenever needed. With BiO2Flow, this issue becomes a thing of the past.

The built-in nebulizer of BiO2Flow allows for the administration of medication while delivering high-flow oxygen therapy to the patient. This enables the patient to receive both oxygenation and medication simply by breathing. As a result, there are no interruptions or reductions in the effectiveness of oxygen therapy





Prevents mucosal dryness with **humidifying feature.**

High-flow oxygen can cause dryness in the nose and respiratory tract over time.

The next-generation built-in humidifier of BiO2Flow mimics the natural heat and moisture balance in the lungs, normalizing the amount of oxygen delivered to the patient's tissues and organs, and ensuring the preservation of cells in the patient's respiratory system.





TIMELY INTERVENTION

FiO₂ Alarm system

BiO2Flow allows for pre-setting the maximum and minimum FiO₂ ratios that the patient will receive. This helps maintain the patient's saturation at an optimal level. When the minimum value is exceeded or the maximum value is surpassed, the alert system activates to facilitate easier control of the therapy process.

The alarm system of BiO2Flow activates in situations such as power outage, unexpected changes in pressure levels, battery failure, loss of patient connection, or inability to calibrate, ensuring continuous monitoring of the patient's condition.



EVERY SECOND COUNTS

Integrated Battery

During high-flow oxygen therapy, it's crucial to maintain a certain level of pressure in the respiratory tract. This pressure helps keep the airways open in patients with respiratory failure. To maintain the significant advantages provided by this pressure, therapy should not be interrupted.

BiO2Flow ensures uninterrupted therapy with its integrated battery, maintaining the desired pressure and oxygen flow.



TECHNICAL SPECIFICATIONS

General Features

Flow:
Pediatric Mode: 2-25 Lpm (1 Lpm Resolution)
Adult Mode: 10-100 Lpm (1 Lpm Resolution)

FiO₂: %21-100 (%1 resolution)

Heat:
Pediatric Mode: 31-34 Degree
Adult Mode: 31-34-37 Degree

Integrated Nebulizer

Integrated Humidifier

Integrated Battery

Universal Patient Circuit Connection

Carrier stand for oxygen cylinder

Safety

Flow interruption feature against blockage and bending conditions

Flow interruption in case of excessive pressure increase

Oxygen cutoff in case of possible malfunction

3 Temperature sensors

Internal thermostat

Double-layer insulated heater

A system preventing leaks

Pressure sensors

Ventilating fan

Advanced alarm system

Exterior design with V₀ flame retardant, rating

Pressure Sources

Air: Internal Blower

Oxygen: 2.5-7 Bar (source with pressure)

BIO₂FLOW

High Flow
Effective Therapy

biosys

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