Respiratory Care

Intelligent Respiratory Care Solution

OmniOx

HFT 750A

MCN-WM-2351 Rev.1.0 20230117

OmniOx

MEKICS strives to have a good understanding of the diseases to be treated and the usage environment of hospitals, and based on clinical issues, endeavors to develop new features and products with the potential to improve such issues and to create a better treatment environment.

OmniOx units built with blower, heated humidifier, and built-in oxygen blender was developed as the world's first equipment that integrates heated humidified high oxygen nasal flow cannula treatment with non-invasive positive-pressure ventilation mode as CPAP and bi-level, enabling safe ventilation treatment in various environments from hospital to home.

Together with from the beginning and to the end of respiratory care

Omni : Every, All
Ox : Oxygen

OmniOx is a compound word of the Latin prefix “Omni” meaning “All” or “Every” and the abbreviation “Ox” for oxygen and has various meanings. OmniOx is our original integrated technology for oxygen treatment transcends the limitations of traditional respiratory treatment to provide tailored ventilation treatment from initial respiratory care to weaning, suited to every person and space in need. Our beginning and end aim is for satisfactory results are intended for all patients suffering from respiratory diseases and healthcare professionals who care for the growing number of patients requiring respiratory treatment.

OmniOx HFT750 Leading a solution

The OmniOx HFT700 utilizes HFNC therapy and includes a flow generator, humidifier, built-in oxygen blender, and supports pulse oximeter and connectivity (HL7, WiFi, Bluetooth) as options.

High Flow Nassal Cannula

Heated humidified high-flow nasal cannula (HFNC) is a patient-friendly and effective treatment for hypoxia because it uses a lighter and more comfortable interface than non-invasive positive pressure ventilation (NIV). It also detects if the circuit is isolated or the cannulas clogged during treatment and sounds an alarm.

Compact Design for mobility and easy installation

Built-in blower & oxygen blender

It has a built-in blower that allows you to proactively respond to the medical environment, enabling you to reliably support the patient's respiratory treatment anytime, anywhere. It also allows the built-in oxygen blender to independently control oxygen concentrations from 21% to 100%to provide stable oxygen to the patient.

Built-in battery

The world's first respiratory therapy device with a built-in battery enables comfortable respiratory therapy everywhere. Patients can expect high treatment satisfaction and faster improvement of their condition with constant respiratory treatment regardless of location. Medical professionals can also reduce the burden of care for patients and provide an efficient treatment environment.

Comfort Improve patient’s comfort and safety

Heated and humidified oxygen administration (Up to 44mg/L)

It enhances pulmonary compliance and conductance compared to traditional cold and dry oxygen-supplied treatments, reducing metabolic work by reducing the gas conditioning process. It also has the advantage of reducing the associated oxygen consumption and carbon dioxide emissions.

Cannula resistance compensation

It is designed to deliver a set flow rate to the patient by sensing increased resistance, even if the prongs are pressed or bent during heating and humidification high flow nasal cannula therapy. However, if the degree of pressed or bent is in a state where the set flow rate cannot be delivered, an alarm is generated to enable safer breathing treatment.

Easy Care Focus on easy operation for clinician

Real-time monitoring of settings and measurements essential for respiratory treatment is possible, to rapidly respond to sudden changes in the patient's symptoms (FiO_2, Flow rate, RR, Airway temp, SpO_2, PR, and S/F ratio). In addition, it is possible to check the history of changes in the patient's symptoms, enabling more efficient treatment.

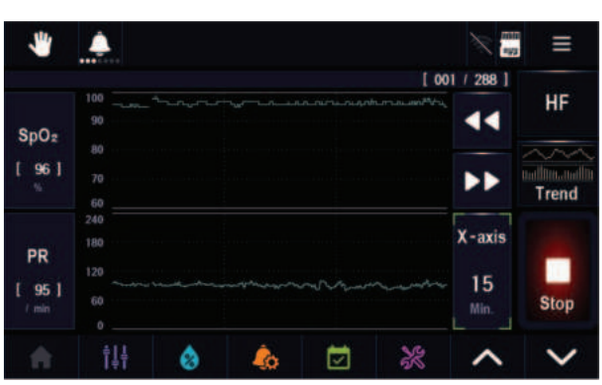
Easy to use,
Simple to set up

All monitoring

When “All monitoring view” type is selected, four additional monitoring parameters are displayed at the bottom of the screen.

Visible graphic wave

During treatment, numeric values are shown along with flow and pressure figures through graphs, allowing for real-time checking of treatment information. also cannula fitting conditions can be checked during HF treatment, providing patients with more comfortable respiratory care.



Trend submenu

Sets a time scale per page. You can set the time to 15 minutes, 30 minutes, 1 hour, 3 hours, 6 hours, 12 hours, 24 hours, 72 hours.
* Regardless of the setting, the total time stored on the device is equal to 72 hours.

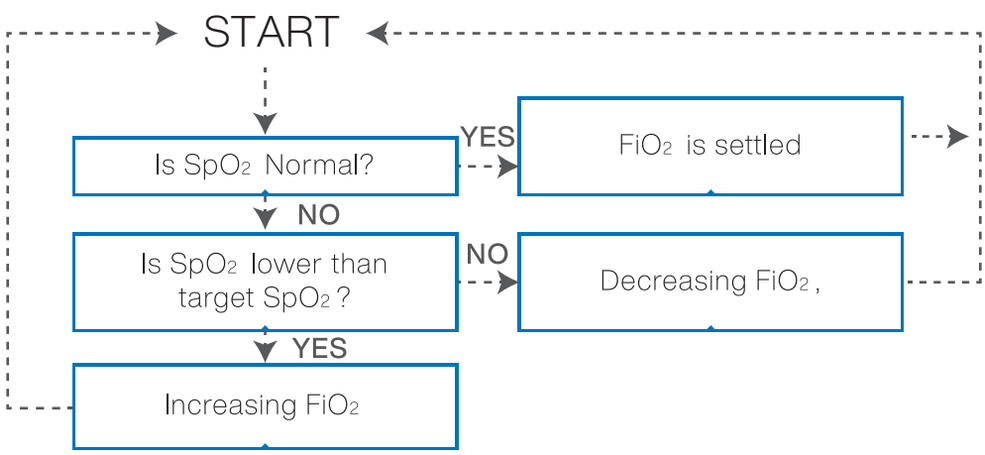
Go beyond limit

TSF (Target SpO_2 feedback controlled by FiO_2)

Higher than target SpO_2 : 'Feedback Control' automatically support to decrease FiO_2

Lower than target SpO_2 : 'Feedback Control' automatically support to increase FiO_2

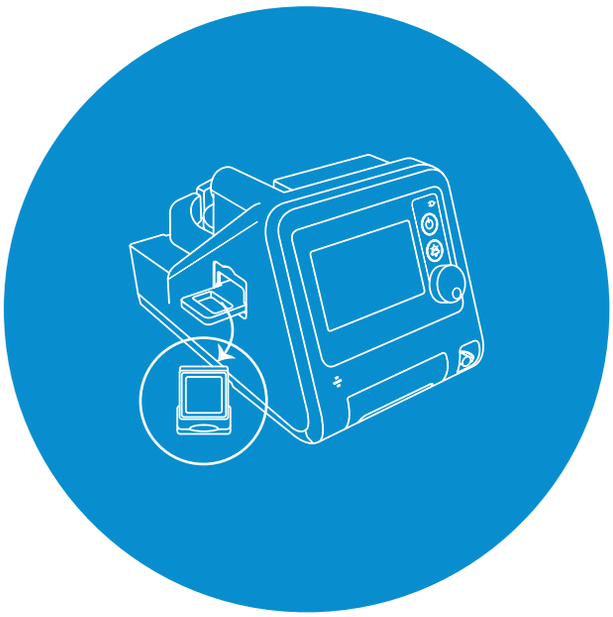
Description of TSF



For safe use

Safeguards to minimize infection

The air flowing in from the outside is filtered through the intake filter, and the patient inhales the filtered air through the bacterial filter. Such air intake method minimizes infections. Also, air humidified in the chamber is directly transferred to the interface for patients, which has the advantage of being safe as humidified air does not re-enter the device.

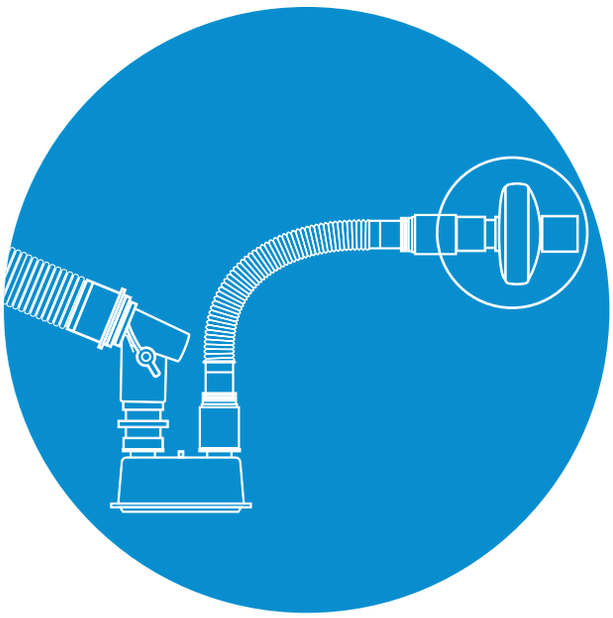


Air intake filter

Test article number	Total CFU recovered	Filtration efficiency (%)
1	9.8×10^1	99.9972
2	3.6×10^1	99.9990
3	5.3×10^1	99.9985

Test article number	Total CFU recovered	Filtration efficiency (%)
1	1.5×10^3	99.982
2	1.3×10^3	99.985
3	2.1×10^3	99.975

* Test results from Nelson Laboratories, Inc. (NLI)

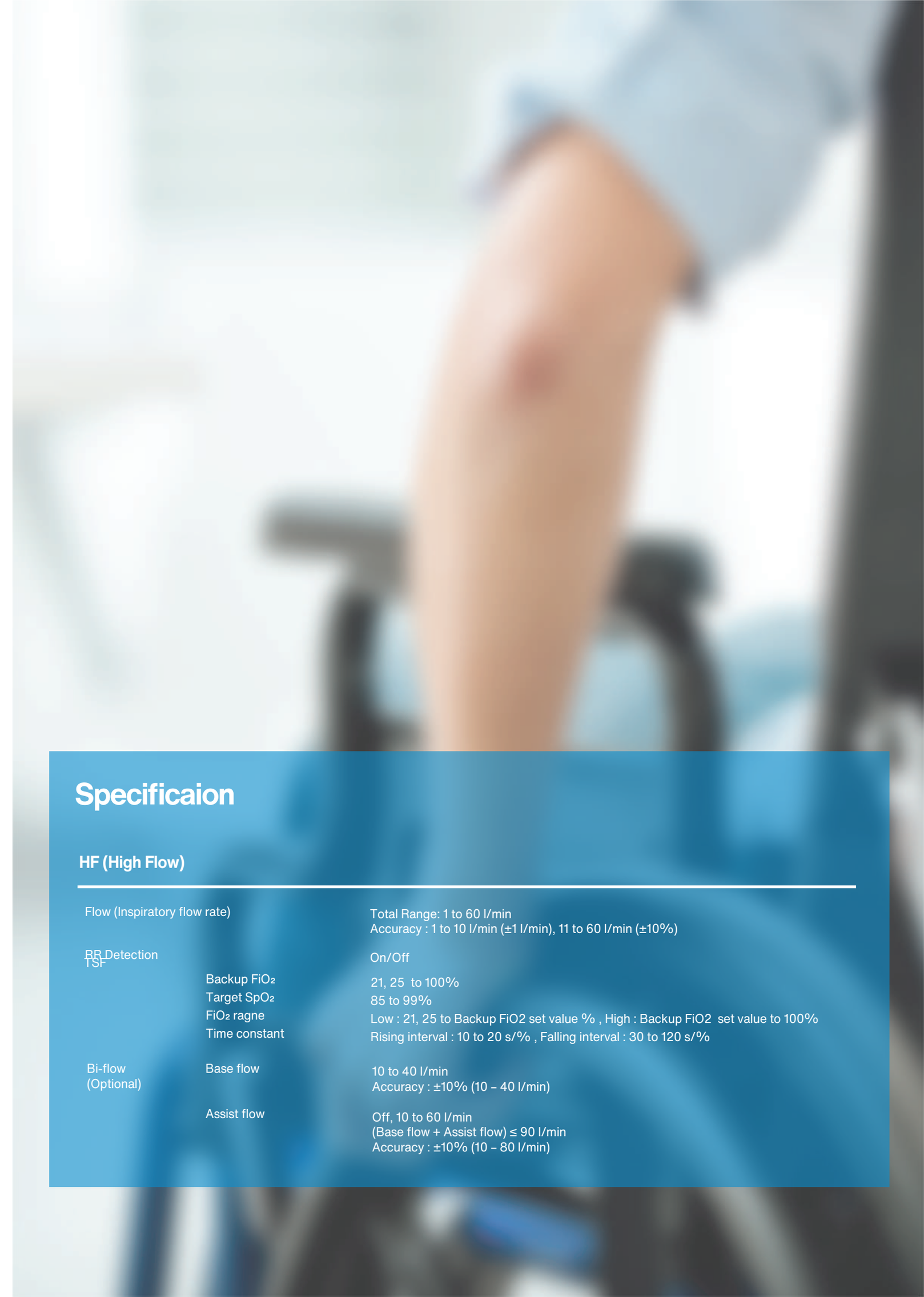


Bacterial filter

Test article number	Total CFU recovered	Filtration efficiency (%)
1	3.1×10^1	99.99983
2	1.0×10^1	99.999946
3	2.6×10^1	99.99986
4	2.6×10^1	99.99986
5	2.1×10^1	99.99989

Test article number	Total CFU recovered	Filtration efficiency (%)
1	8.6×10^2	99.9952
2	8.6×10^2	99.9952
3	1.4×10^3	99.9923
4	5.3×10^2	99.9970
5	1.0×10^3	99.9943

* Test results from Nelson Laboratories, Inc. (NLI)



Specificaion

HF (High Flow)

Flow (Inspiratory flow rate)		Total Range: 1 to 60 l/min Accuracy : 1 to 10 l/min (±1 l/min), 11 to 60 l/min (±10%)
RR Detection		On/Off
TSF	Backup FiO_2	21, 25 to 100%
	Target SpO_2	85 to 99%
	FiO_2 ragne	Low : 21, 25 to Backup FiO2 set value % , High : Backup FiO2 set value to 100%
	Time constant	Rising interval : 10 to 20 s/% , Falling interval : 30 to 120 s/%
Bi-flow (Optional)	Base flow	10 to 40 l/min Accuracy : ±10% (10 – 40 l/min)
	Assist flow	Off, 10 to 60 l/min (Base flow + Assist flow) ≤ 90 l/min Accuracy : ±10% (10 – 80 l/min)

CE 2460

As MEKICS's products are ceaselessly improved, the actual product may differ from the descriptions, specifications, and the pictures in this publications.

MEKICS. CO., Ltd

Headquarter / Factory
21, Sangjiseok-gil, Paju-si, Gyeonggi-do, South Korea 10911

Branch Office
12, Moraenae-ro 7-gil, Mapo-gu, Seoul, South Korea 03949

www.mek-ics.com