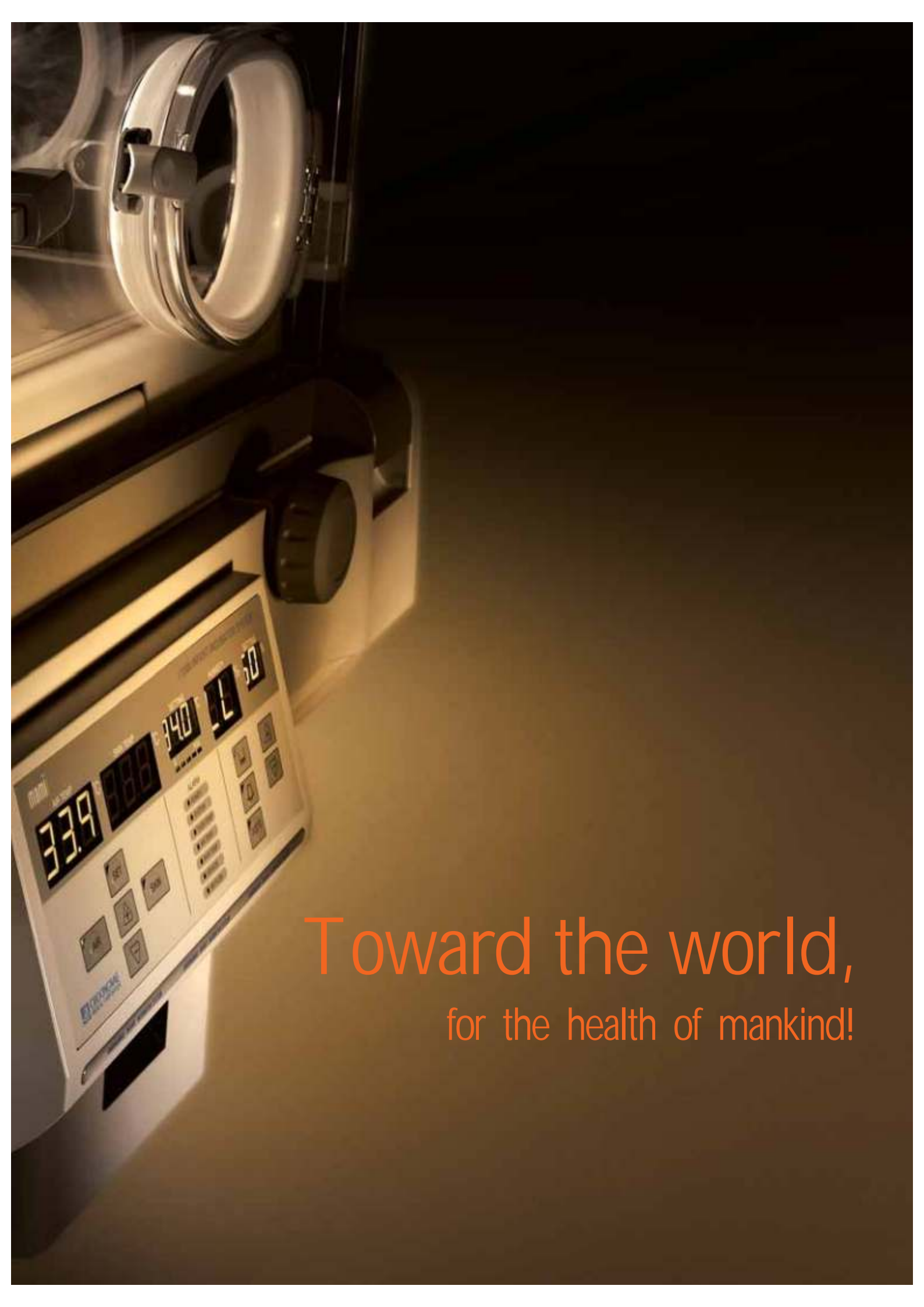




JW HOSPITAL EQUIPMENT SERIES
INFANT CARE SYSTEM
INFANT INCUBATOR





Toward the world,
for the health of mankind!



Eternal Love & Forever Happy...



Toward the world, for the health of mankind!

Intending to the greatest “**MEDIPIA(Medical Utopia)**” in the field of health & medicare for the human beings, JW MEDICAL Corporation has produced the excellent medical instruments and the state of the art medical equipments for 31 years based on the slogan which is “Toward the world, for the health of mankind...”

In order to make much more contribution to the progress of mankind's health industry and the advancement of medical welfare, JW MEDICAL Corporation is producing the newest Radiology Diagnostic System including many kinds of medical equipments and developing technical manufactures to provide medical benefits for patients under the Inferior environment.

“**JW MEDICAL**” is a reciprocal profitable enterprise for customers with the best Intention, giving the greatest satisfaction to them.

Infant Care Systems are manufactured in accordance with No.108 for the Approval of Medical Equipment Manufacturing by Ministry of Health & Welfare in Republic of Korea. Infant Incubator acquired EM (Excellent of Machine) Mark from “National Industrial Technology Institute”, and acquired ISO 9001, CMP Certificate from Korea Testing Laboratory, and CE mark from Det Norske Veritas.



K040910



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Certificate
No.2000-751-003



Certificate
No.95-18



Certificate
No.KRQ-0092



CHS-*i* 1000

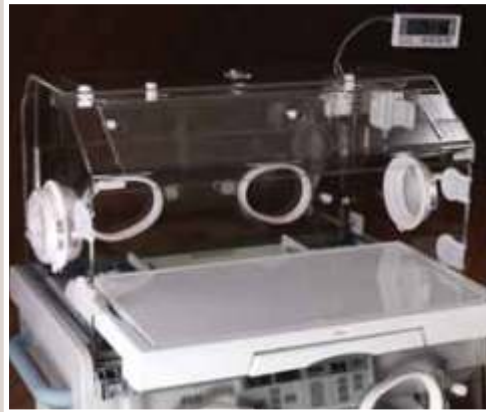
INFANT INCUBATOR

The new CHS-i1000 Infant Incubator allows create optimal conditions through precise control of hood temperature and humidity by use of microprocessor.

Double walls are also adopted to minimize radiant heat loss and such effect of external heat loss on infants.

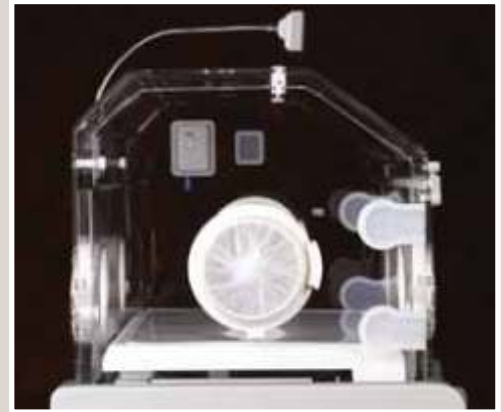
By use of microprocessor, CHS- *i*1000 makes it possible to control temperature and humidity of the hood inside precisely. It is designed that air circulation system minimizes the heat loss in the hood by use of double wall structure and air wall(curtain). Humidity can be adjusted between 30~95% with a humidity controller. 11 types of audible & visible alarm devices enable users to identify problems of the infant or Incubator easily, if the incubator has some trouble in its operation. Double safety device makes overheat of heater cannot affect the safety of the infant. In order to provide comfortable and silent environment for the infant, the noise level of the CHS-*i*1000 Infant Incubator is programed to lower than 45dB(A), which is lower than IEC60601-2-19 standard.

CHS-*i*1000 INFANT INCUBATOR



Simultaneous Care for Multiple birth

Multiple births have escalated over the years. Recent clinical studies observed the possibility of inhibited growth with premature twins suffering from separation trauma. The new CHS-*i*1000 from JW MEDICAL allows you to simultaneously monitor your low birthweight twin infants in one incubator. A large mattress allows the clinician the sufficient spaces for caring both babies and provides enough room for both infants to grow comfortably.



Double Wall

Consistent air temperature is imperative to the development of a premature baby. The CHS-*i*1000 infant incubator adopts Double Wall Structure to minimize radiant heat loss from the newborn baby skin and maintain air temperature at constant level by flowing warm air between inner wall and outer wall during the operation. Inner wall is designed to be detached easily from the main hood for cleaning the inside of the hood and sterilization.

Sensor Box

The controller module of the CHS-*i*1000 receives the data such as air temperature, skin temperature, humidity from the Sensor Box. These data are displayed on large LEDs of the control panel. The connector and skin sensor is easily detached from the sensor box when cleaning or sterilizing the incubator hood.



Air Wall(Curtain)

Air wall(Curtain) is incorporated into the new CHS-*i*1000 to help reduce temperature fluctuation within the incubator when the front door is opened for treatment of infant. The incubator will not drop by more than 1.5°C

Humidity Control and display

Humidity of the hood inside can be controlled until it reaches to the setting value and the range of the humidity control is between 30%~95%. The generated humidity is supplied to the hood by air circulation system. The measured value is displayed on the humidity display window.

The display range is between 30%~95% and if humidity is lower than 30% or higher than 95%, LL or HH is indicated on the humidity display window.



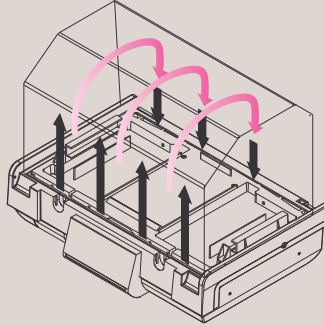
Standard



Option

Air Circulation System

The new CHS-i1000 infant incubator adopts an Air Circulation System to maintain consistent air temperature and humidity in the hood and reduce radiant heat losses from the infant by flowing warm air between inner wall and outer wall with circular blower.



Humidity Reservoir

The humidity reservoir is removable. It makes it easier to replace used water with fresh water and to clean the reservoir.



Alarm function for safety

Power Fail. : When the power is off or disconnected accidentally.

System Fail. : When the system error occurs.

Over Temp. : When the air temp. is over maximum control range by 1.0°C.

Air Flow : In case of non-operation of fan & motor.

Sensor Fail. : The sensors are disconnected or the wire of the sensors is broken.

Air Temp. : When the air temp. differ from setting temp. by over 1.0°C or lower 2.0°C

Skin Temp. : When the real skin temp. differ from setting temp. by over 1.0°C

Low-Water : When the level of humidification water is lower than limit on the humidity reservoir.

In every case, the Alarm lamp will be flash and audible alarm will also sound



The mattress can be in trendelenburg position. The tilting range is between $\pm 12^\circ$.

Product Line up

JW MEDICAL Infant incubator CHS-*i*1000 Series-a list of main features and function.



Type		A	B	C	D	E	Remark
Hood	Basic Type						
	X-ray Cassette & Dial Tilting						
	Weight Scale(Optional)						
Cabinet	Fixed Type						
	Up/down Adjustable						

Option & Supplies

Gradual tilting grip

Internal Bed can be tilted continuously and smoothly to a user's preference $\pm 12^\circ$

Up/Down Cabinet(Optional)

The height of incubator can be elevated to accommodate user's treatment
1,016(W) X 701(D) X 642(H) (630~880mm)

Weight Scale(Optional)

The weight of infant can be taken without moving of baby.

Additional Displayer of weight gives better convenience to care giver.

X-Ray Cassette Tray(Optional)

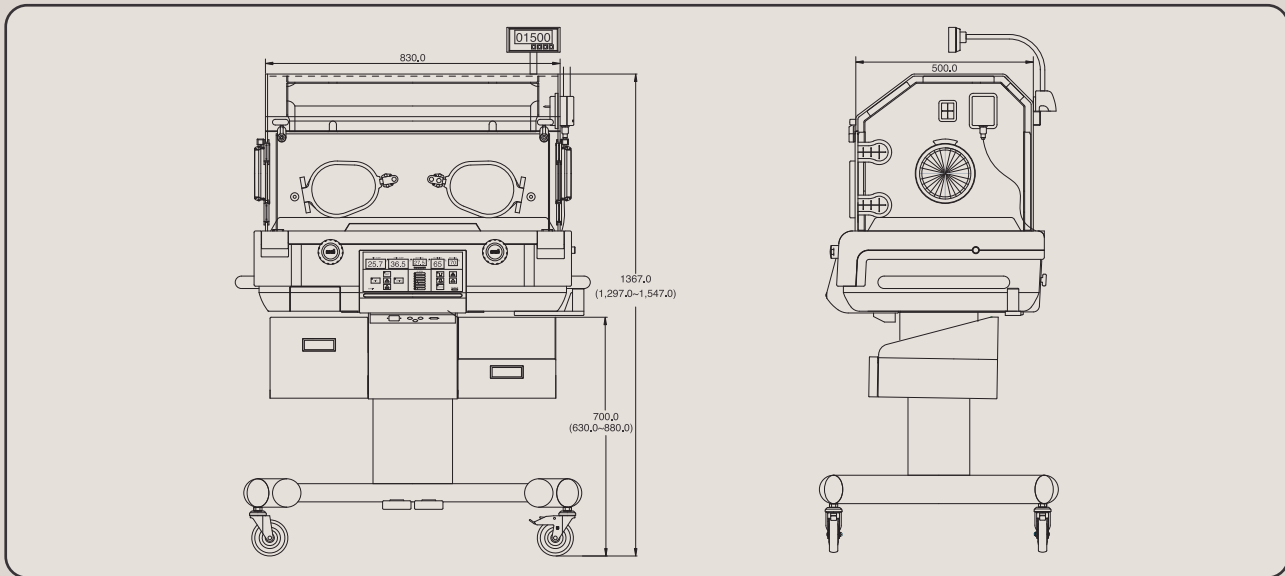
The X-Ray Cassette Tray is applied in the mattress platform. X-Ray can be taken minimizing patient disturbances.

Electrostatic Filter(Standard)

For higher efficiency in collecting and retaining dust, the electrostatic filter is adopted.



DIMENSION



SPECIFICATIONS

Performance Data	
Application area	Infant care, preterm infant
Air flow velocity across mattress	< 10 cm/sec
Temperature overshoot	< 0.5°C
Temperature uniformity with a level mattress	< 0.8°C
Control mode	Air / Skin Mode
Warm-Up Time	Under 20 min
X-Ray cassette Tray (W x H x D)	372 x 36 x 375 mm
Noise level in Hood	< 45 dBA
	< 47 dBA (with Oxygen Concentration)
Air Filter	Efficiency 99.99%
	Particle size 0.3 micron
Alarms (L.E.D)	Power fail, System fail, Sensor fail, Over Temp fail, Air flow fail, Air Temp fail, Skin Temp fail, Low-Water, SpO2 fail, O2 fail.
Control panel	
Display screen	TFT LCD
	pixels 1024 x 860
Display parameters	Air temperature, Skin temperature, Setting temperature, Humidity %, Setting humidity %, SpO2 %, Pulse per min, O2%
Number of screens	5 screens
	8 screens (option)
Hood Specifications	
Dimension (W x H x D)	830 x 480 x 500 mm
Hood system	Double wall type
Port	4 access ports and 2 iris ports
Door open (W x H)	832 x 350 mm
Tube inlet	4 pcs tube inlet S
	2 pcs tube inlet L
Mattress tray size (W x D)	797 x 432 mm
Mattress size (W x H x D)	705 x 20 x 370 mm
Mattress to hood height	420 mm
Mattress tilt	± 12°
I.V pole	Ø 2.0 cm
	Length 125.0 cm
Cabinet Specifications	
Dimension (W x D)	1,060 x 642 mm
Height	701 mm
	630 ~ 880 mm (Option)
Volume	80 L
Drawers	2 pcs.
Door closing mechanism	Soft-stop hinges.
Opening angle of the door	> 150°
Casters	4 casters, with friction brake
Skin Temperature Measurement	
Display Range	+ 22 ~ +42°C.
Control Range	+ 34 ~ + 37°C (Override Mode: 37.1°C ~ 38.0°C)
Precision	± 0.3°C (Within the range)
Resolution	± 0.1°C
Air Temperature Measurement	
Display Range	+ 5 ~ +50°C.
Control Range	+ 20 ~ + 37°C (Override Mode: 37.1°C ~ 39.0°C)
Precision	± 0.3°C (Within the range)
Resolution	± 0.1°C

Humidity Control	
Control mode	Auto Control
Control Range	30 ~ 95% in 1% increments
Indicating Range	30 ~ 95%
Precision	Within 5%
Resolution	± 1%
Water reservoir Capacity	1,500 ml (user about 24 h)

Oxygen Concentration (Option)	
Control Range	19 – 99%
Indicating Range	0 – 99%
Precision	Within ± 2%.
Resolution	± 1%.

SpO2 Measurement (Option)	
Pulse rate	25 to 250 bpm
% SpO2	0 – 100%
Precision	± 2%.
Resolution	± 1%.

Weight Scale (Option)	
Scale Range	0 – 15 Kg.
Dimension (W x H x D).	396 x 67 x 405 mm
Display screen	TFT LCD
	pixels 1024 x 860
Precision	5g
Resolution	5g
Function	Zero, Hold, Tare

Power Source	
	AC 230V ± 10%; 50/60 Hz
	Fuse: 250V, 4A

Power consumption	
Heater	450 W ± 10%
Controller	60 W ± 10%
Humidity	23 W ± 10%
Cabinet	50 W ± 10%
Oxygen Supply Module	15 W ± 10%

Dimensions and Weight	
Dimension (W x H x D)	1202 x 750 x 1367 mm
	1202 x 750 x 1297 – 1567 mm (Option)
Weight	97 Kg (Standard)
	130 Kg (Full Option)

Environmental conditions	
Operating temperature	0 to 40°C.
Storage temperature	-40 to 70°C.
Operating humidity	20 to 95% (noncondensing)
Storage humidity	10 to 95%
Operating atmospheric pressure	700 to 1060 hPa
Storage atmospheric pressure	500 to 1060 hPa

Device Classification	
Protection class	Class I, Type BF
IP-Protection	IPX2
Electrical Safety	EN 60601-1 ; EN 60601-2-19

ACCESSORY

Standard Accessory		Option accessory	
Filter	: 3 pcs	UP/Down Cabinet	: 1 set
Skin temp. probe	: 1 pc	Weight Scale	: 1 set
I.V Pole	: 1 pc	X-ray Cassette & Dial Tilting	: 1 set
Access Port Cover	: 1 pcs.	Oxygen Concentration	: 1 set
Dust Cover	: 1 pc	SpO2 Measurements	: 1 set
Fuse	: 2 pcs.		
Power Cord	: 1 pc		