

# Dual Incu<sup>i</sup>

ATOM Hybrid Incubator



# New generation of hybrid incubator evolved from incubator

It is an high-end model in the Atom Infant Incubator series. It supplies two types of warming modes, a radiant heat source from the top, together with a convective heat source, when the hood is closed.

<Incubator mode>



<Infant warmer mode>



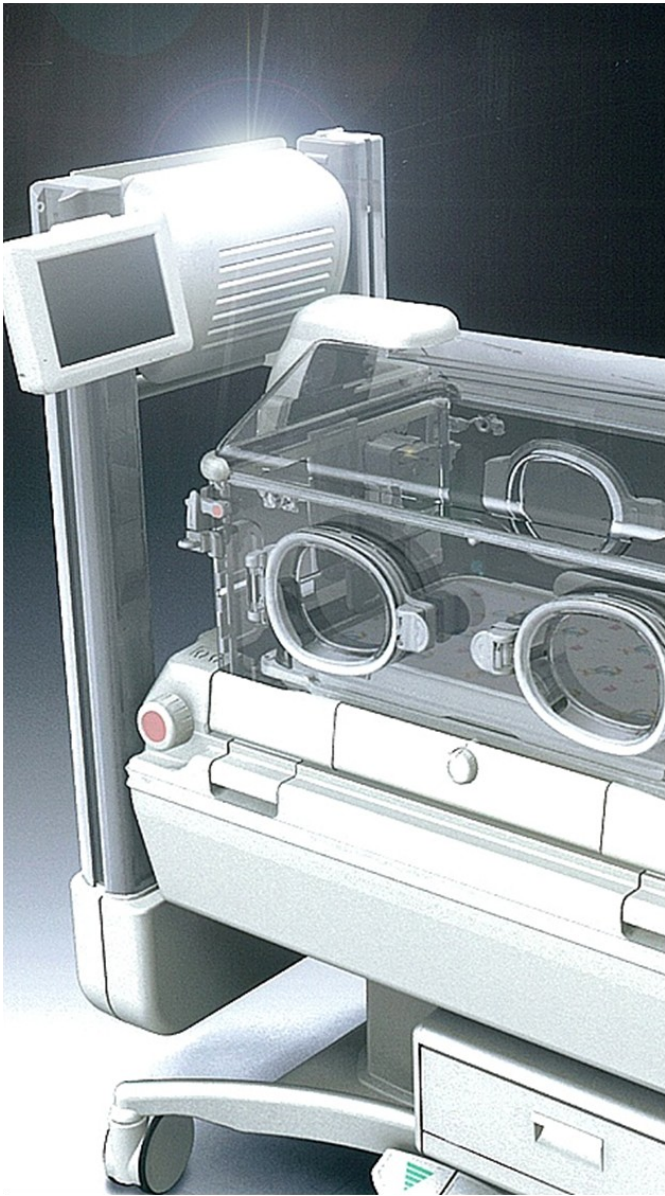
## An easy-to-see, user-friendly, multi-functional display

External TFT-LCD Colour Display is steerable and detachable: on external display doctors/nurses have the possibility to set parameters, to get numerical and graphical information for all integrated parameters. The display is touch screen and adjustable on left or right side to operate at the best position. The trend display function helps identify changes in the infant's vital signs and the environment with the incubator.



## The air circulation system to reduce infant's heat loss

The air circulation system allow warm air to continuously flow between the inner wall and the outer wall on the front side and the rear side of the hood. It creates an even and uniform distribution of the incubator air temperature as well as minimizes the infant's radiant heat loss by warming the inner walls of the hood. It also minimizes the infant's convective heat loss by keeping the air circulation flow at a low rate. Even when the front admittance panel is open, the incubator air temperature is maintained by the warm air flowing up from below the front admittance panel and thus shutting out the ambient air.



**Servo-humidity control**

Servo-controlled humidity chamber is a cassette type and inserted in the canopy. There are two humidity sensors to detect “Near Empty and “Empty” Water Level Alarms. The humidification system is realized with active injection of sterile water steam through boiled water (100 °C) and precisely maintains the relative humidity at a constant level in the incubator. Water tank and internal boiler is easily removable for cleaning and disinfection.



**Integrated X-Ray Cassette**

The X-ray cassette tray is externally accessible from both sides of the unit without opening access panels in order to maintain the internal atmosphere. X-ray photo can be taken without moving the infant.



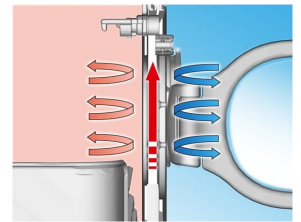
**Mattress platform with smooth continuous tilt**

The mattress platform can be smoothly tilted to desired angle up to 13 degrees by operating its continuous tilting mechanism. The tilting levers are accessible externally from both directions. When the access panels are open, the mattress platform can be slid both sides. The Baby Guards consisting in four removable internal panels are available in order to prevent baby's falling during Infant Warmer mode.



**Hands-Free Door Latches and Air-curtain**

Hands-free door latches can be opened and closed silently with the touch of the elbow. It reduces the risk of contamination. Even when the door is open, the internal atmosphere is maintained thanks to the air-curtain flowing up through dual wall panel.



**Electrostatic filter system keeps a clean environment**

The electrostatic filter is much more efficient in collecting and retaining dust than conventional air filters and easy to check from transparent window and replace without using any tool. The message for replacement of the filter is indicated on the color display when the time for replacement comes.



### A double-lock mechanism for the improved safety of the front admittance panel

The entire front panel opens fully for procedures. The wide front admittance panel enables you to place and remove the infant or an oxygen head box with ease. In addition to the knob operated, locking mechanism, a front admittance panel stopper is provided for automatically locking the front admittance panel when closed. When the admittance panel is open, it slowly opens with silent without touching.



### Electrical canopy lift

When the canopy is moved up or down in order to change the operation mode, the operator can stop the up/down movement at any time. Furthermore, if there is any obstacle during the movement, the canopy is automatically stopped for safety reason.



### The add-on system enable the unit to be provided with optional functions

The pulse oximeter and the weight monitor can be optionally added to the basic unit at a later date depending on how you want to use the incubator.

### Precise thermal control to maintain an optimal environment for the infant

Two temperature control modes are available: servo control and manual control. An override function, which enables a higher temperature setting (including air temperature and skin temperature), is also provided.

### Hi-Low Stand

Hybrid system has an Electrical Height adjustment with double pedals (front and rear side). The height is adjusted up to 40 cm.



### Drawer

Drawer is available as an option. The drawer is closed very silently in order to minimize the sound stress to a baby.



## Add-on Unit

Model Number	<i>Model 100</i>	
Power Requirement	AC120V	AC220-240V
Humidity Controller	●	●
SpO2 Masimo	△	△
SpO2 Nellcor	△	△
Oxygen Controller	●	●
Weight Monitoring	△	△
Hi-Low Stand	●	●

● : Standard Unit    △ : Add-on Unit



# Specifications

<b>Power requirements</b>	Customer specified Power consumption : 800VA (Maximum)
<b>Classification</b>	Class I, Type BF
<b>External display</b>	8.5 inches TFT-LCD (256 colors)
<b>Temperature Control</b>	< Incubator mode > Temperature setting range : Skin temperature (Servo Control) : 34.0 - 37.5°C Incubator air temperature (Manual Control) : 23.0 - 37.0°C Temperature display range : Skin temperature : 30.0 - 42.0°C Incubator air temperature : 20.0 - 42.0°C Heater output indication : 0-100% (in 10 levels) Warming time : ≤ 60min at ambient temperature 25°C
<b>Humidity control</b>	Humidity control mode : Servo Control Humidity setting range : 40-95% RH Humidity display range : 15-99% RH Maximum humidity : ≥ 90% Alarms : humidity sensor, low water level, empty water, humidity chamber off, selected humidity
<b>Oxygen Controller</b>	Oxygen control mode : Servo control Setting range : 22-65% Display range : 15-105% Alarms : Oxygen sensor, oxygen concentration, oxygen flow rate, oxygen sensor position error
<b>Dimensions</b>	With HL stand : 68(W) X 119(D) X 138-226(H)cm (without display) Mattress surface : 80-120cm    Mattress surface w/ weight monitor : 81.5-121.5cm External display : 24.5(W) X 6.5(D) X 16(H)cm Mattress : 65(W) X 36.5(D) X 2(H)cm
<b>Weight</b>	Approx. 128kg    (w/Weight Monitor : Approx. 132 kg)
<b>Accessories</b>	Skin temperature probe .....1 F-6E electrostatic filter .....1 Dust cover .....1 Connecting hose .....1 Oxygen sensor .....2

## < Infant Warmer Mode >

<b>Warmer mode</b>	Temperature control: Manual control / Servo control Heater capacity : 500W Skin temperature: Setting range : 34.0-37.5°C Display range : 30.0-42.0°C Heater output : 0-100% (in 5% increments) Heater indication range : 0-100 (in 10 levels) Alarms : Skin temperature, check baby, skin temperature probe
<b>Timer</b>	Timer mode : APGAR, CPR Timer display range : 0-60min Display interval : 1 second APGAR Timer : Chime setting : 1, 3, 5, 10min CPR Timer : Chime interval : 30 seconds Second pointer operating time : 6 seconds X 2 times

## < Add-on Unit >

<b>Weight Monitor</b>	Weight measurement range : 300-7000g (in automatic mode) Weight measurement unit : 1g Weighing mode : Manual, Automatic
<b>SpO2 Unit</b>	Display range : 1-100%SpO2 Pulse rate display range : 25-240bpm Alarms : SpO2 high/low limit, pulse rate high/low limit, SpO2 sensor

Note: Information in this document is subject to change without notice.



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