



## Technical Data Sheet



Hi-Low/Tilt



Cabinet/Tilt

### 1. Performance and Functions

- The Sunflower Warmer's far-infrared heater efficiently warms the infant, mitigating the strain of decreased body temperature.
- The device can be controlled in two ways: using manual control to set the heater output, or support control to maintain the infant's skin at a set temperature. Just flick a switch to change to the most appropriate method for the infant's condition.
- An integrated CPR timer supports evaluation of timing during resuscitation, and a built-in second signal helps to calculate heart rate. It can also be switched to an Apgar timer for use with Apgar scoring.
- The canopy has 170° of horizontal rotary movement (85° left and right), This keeps heat away from the caregiver's head.

### 2. Operability

- Settings and measurements are grouped by item for even easier operation.
- All the equipment needed for observation and treatment can be made available beside the radiant warmer, enhancing its functionality and removing the need for a separate equipment table.
- The large bed offers continuous  $\pm 13^\circ$  forward/rear tilt to facilitate treatment and care. (Hi/Tilt, Cabinet/Tilt)
- The bed height can be adjusted between 83-103cm using the foot switch to allow strain-free care and treatment.(Hi-Low /Tilt)

### 3. Safety and Sanitation

- Baby guards prevent the infant from falling out. (Hi-Low/Tilt, Cabinet/Tilt, Cabinet Steel/Wood)
- The guards are equipped with rotary dampers which lower them gently even when released, ensuring no noise stresses to the infant or staff. (Hi-Low/Tilt, Cabinet/Tilt, Cabinet Steel/Wood)
- The supplied pressure-distributing mattress protects the infant from bedsores. (Hi-Low/Tilt, Cabinet/Tilt, Cabinet Steel/Wood)
- The baby check function provides audible and visual notifications after every 15 minutes of heating, so the infant can be safely left with the heater running. The ability to confirm the duration of heating also helps caregivers to decide on treatment.
- Heating is displayed in 10 levels, enabling easy visual checking.
- The device also has a self-diagnostic test function which runs on startup and automatically checks for any malfunctions.

## Specifications

### Sunflower Warmer, Hi-Low / Tilt Sunflower Warmer, Cabinet / Tilt

Description		Hi-Low Tilt AC230V	Hi-Low Tilt AC120V	Cabinet Tilt AC230V	Cabinet Tilt AC120V	
Atom's Code		61565	61564	61567	61566	
Power requirements	Main Unit	Rating	AC230V	AC120V	AC230V	
		Frequency	50/60Hz	60Hz	50/60Hz	60Hz
		Power consumption	700VA			
		Operating voltage range	AC230V ±10%	AC120V ±10%	AC230V ±10%	AC120V ±10%
	Hi-Low Stand	Rating	AC230V	AC120V	—	—
		Frequency	50/60Hz	60Hz	—	—
		Power consumption	120VA			
		Operating voltage range	AC230V ±10%	AC120V ±10%	—	—
Classification		Type of protection	Class I equipment			
		Degree of protection	Type BF applied part			
Control mode		Microprocessor control				
Temperature		Control mode	Manual control/servo control (selectable)			
		Heater capacity	500W			
		Skin temperature setting range	34.0–38.0°C (in 0.1°C increments)			
		Skin temperature display range	30.0–42.0°C			
		Skin temperature display accuracy	±0.3°C			
		Heater output setting range	0–100% (in 5% increments)			
		Heater output indication	In 10 levels			
		Alarms	Set temperature, Overheat, Baby check, Skin temperature probe, System failure, Power failure			
		Warming time indication (Baby Check)	Audible and visual alarms are given every 15 minutes of warming when the heater output is set to a predetermined value or higher in the manual control mode.			
		Heat level at the preheat mode	24mW/cm <sup>2</sup> (Heater output 100%) 6mW/cm <sup>2</sup> (Heater output 30%)			
Timer		Timer mode	Apgar, CPR			
		Time display range	0–60 minutes			
		Time display unit	1 second			
		Apgar timer	Settings of the Apgar chime			
		CPR timer	Interval between each chime			
			Operation of the second counter			
Mattress platform tilting		Longitudinal tilt of ±13°(freely adjustable)				
Lighting		Intensity	600 lx			
Caster		Quantity	4 pieces			
		Number of locking caster	4 pieces			
		Diameter	100mm			
		Shape	Dual wheel caster			
		Conductivity	Available			
Weight		Approx. 89kg		Approx. 96kg		
Dimensions		Main body (including HL Stand)	640(W) x 1140(D) x 1770–1970(H)mm		610(W) x 1060(D) x 1870(H)mm	
		Mattress surface	800–1000mm		900mm	
		Mattress	500(W) x 700(D) x 25(T)mm		500(W) x 700(D) x 25(T)mm	
Maximum load capacity		Dovetail rail	Approx. 20kg at a side			
		I.V. Pole (option)	Approx. 10kg			
			*Total load capacity of the dovetail rail and the I.V. pole is approx. 30kg			
		Drawer (option)	Approx. 3kg			
Operating conditions		Ambient temperature	18–30°C			
		Relative humidity	30–75%			
		Atmospheric pressure	70–106kPa			
Storage conditions		Ambient temperature	0–50°C			
		Relative humidity	30–75%			
		Atmospheric pressure	70–106kPa			
Alarms		Set temperature, Baby check, Power failure, System failure, Skin temperature probe				
Standards compliance		IEC	IEC60601-1, IEC60601-2-21			
		EN	EN60601-1, EN60601-2-21			
		JIS	JIS T0601-1, JIS T0601-2-21			

# Specifications

Sunflower Warmer, Cabinet / Steel		Cabinet Steel AC230V	Cabinet Steel AC120V	Cabinet Wood AC230V	Cabinet Wood AC120V
<b>Description</b>		Cabinet Steel AC230V	Cabinet Steel AC120V	Cabinet Wood AC230V	Cabinet Wood AC120V
<b>Atom's Code</b>		61569	61568	61571	61570
Power requirements	Rating	AC230V	AC120V	AC230V	AC120V
	Frequency	50/60Hz	60Hz	50/60Hz	60Hz
	Power consumption	700VA			
	Operating voltage range	AC230V ±10%	AC120V ±10%	AC230V ±10%	AC120V ±10%
Classification	Type of protection	Class I equipment			
	Degree of protection	Type BF applied part			
Control mode		Microprocessor control			
Temperature	Control mode	Manual control/servo control (selectable)			
	Heater capacity	500W			
	Skin temperature setting range	34.0–38.0°C (in 0.1°C increments)			
	Skin temperature display range	30.0–42.0°C			
	Skin temperature display accuracy	±0.3°C			
	Heater output setting range	0–100% (in 5% increments)			
	Heater output indication	In 10 levels			
	Alarms	Set temperature, Overheat, Baby check, Skin temperature probe, System failure, Power failure			
	Warming time indication (Baby Check)	Audible and visual alarms are given every 15 minutes of warming when the heater output is set to a predetermined value or higher in the manual control mode.			
	Heat level at the preheat mode	24mW/cm <sup>2</sup> (Heater output 100%) 6mW/cm <sup>2</sup> (Heater output 30%)			
Timer	Timer mode	Apgar, CPR			
	Time display range	0–60 minutes			
	Time display unit	1 second			
	Apgar timer	Settings of the Apgar chime			
	CPR timer	Interval between each chime			
Lighting	Intensity	600 lx			
	Quantity	4 pieces			
Caster	Number of locking caster	4 pieces			
	Diameter	100mm			
	Shape	Dual wheel caster			
	Conductivity	Available			
	Weight	Approx. 96kg		Approx. 85kg	
Dimensions	Main body	610(W) x 1060(D) x 1870(H)mm			
	Mattress surface	900mm			
	Mattress	500(W) x 700(D) x 25(T)mm			
Maximum load capacity	Dovetail rail	Approx. 20kg at a side			
	I.V. Pole (option)	Approx. 10kg			
	Drawer (option)	*Total load capacity of the dovetail rail and the I.V. pole is approx. 30kg			
Operating conditions	Ambient temperature	18–30°C			
	Relative humidity	30–75%			
	Atmospheric pressure	70–106kPa			
Storage conditions	Ambient temperature	0–50°C			
	Relative humidity	30–75%			
	Atmospheric pressure	70–106kPa			
Alarms	Set temperature, Baby check, Power failure, System failure, Skin temperature probe				
Standards compliance	IEC	IEC60601-1, IEC60601-2-21			
	EN	EN60601-1, EN60601-2-21			
	JIS	JIS T0601-1, JIS T0601-2-21			



Cabinet/Steel



Cabinet/Wood

# Specifications

## Sunflower Warmer, Stand Sunflower Warmer, Wall Mount

Description		Stand AC230V	Stand AC120V	Wall Mount AC230V	Wall Mount AC120V	
Atom's Code		61573	61572	61575	61574	
Power requirements	Rating	AC230V	AC120V	AC230V	AC120V	
	Frequency	50/60Hz	60Hz	50/60Hz	60Hz	
	Power consumption	700VA				
	Operating voltage range	AC230V ±10%	AC120V ±10%	AC230V ±10%	AC120V ±10%	
Classification	Type of protection	Class I equipment				
	Degree of protection	Type BF applied part				
Control mode		Microprocessor control				
Temperature	Control mode	Manual control/servo control (selectable)				
	Heater capacity	500W				
	Skin temperature setting range	34.0–38.0°C (in 0.1°C increments)				
	Skin temperature display range	30.0–42.0°C				
	Skin temperature display accuracy	±0.3°C				
	Heater output setting range	0–100% (in 5% increments)				
	Heater output indication	In 10 levels				
	Alarms	Set temperature, Overheat, Baby check, Skin temperature probe, System failure, Power failure				
	Warming time indication (Baby Check)	Audible and visual alarms are given every 15 minutes of warming when the heater output is set to a predetermined value or higher in the manual control mode.				
	Heat level at the preheat mode	24mW/cm <sup>2</sup> (Heater output 100%) 6mW/cm <sup>2</sup> (Heater output 30%)				
	Timer	Timer mode	Apgar, CPR			
Time display range		0–60 minutes				
Time display unit		1 second				
Apgar timer		Settings of the Apgar chime 1,5 and 10 minutes (factory default) (Settings at 1,3,5 and 10 minutes are also possible)				
CPR timer		Interval between each chime 30 seconds Operation of the second counter 6 sec. x 2				
Lighting	Intensity	600 lx				
Caster	Quantity	6 pieces			–	
	Number of locking caster	6 pieces			–	
	Diameter	75mm (Large) , 50mm (Small)			–	
	Shape	Single wheel caster			–	
	Conductivity	Unavailable			–	
Weight		Approx. 51kg		Approx. 20kg		
Dimensions	Main body	730(W) x 950(D) x 1840(H)mm			450(W) x 950(D) x 300(H)mm	
	Mattress surface	660–860mm			900–1050mm from mattress surface	
Maximum load capacity	Dovetail rail	Approx. 10kg at a side			–	
	I.V. Pole (option)	Approx. 10kg *Total load capacity of the dovetail rail and the I.V. pole is approx. 20kg			–	
					–	
	Drawer (option)	Approx. 3kg			–	
Operating conditions	Ambient temperature	18–30°C				
	Relative humidity	30–75%				
	Atmospheric pressure	70–106kPa				
Storage conditions	Ambient temperature	0–50°C				
	Relative humidity	30–75%				
	Atmospheric pressure	70–106kPa				
Alarms		Set temperature, Baby check, Power failure, System failure, Skin temperature probe				
Standards compliance	IEC	IEC60601-1, IEC60601-2-21				
	EN	EN60601-1, EN60601-2-21				
	JIS	JIS T0601-1, JIS T0601-2-21				



Stand

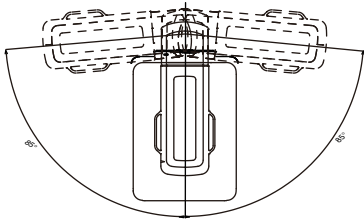
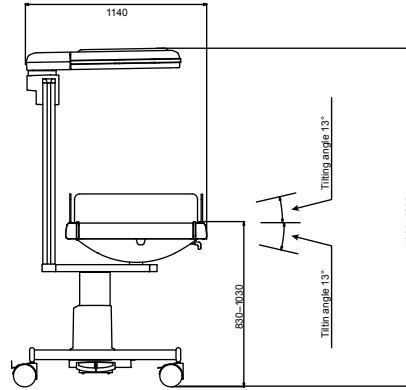
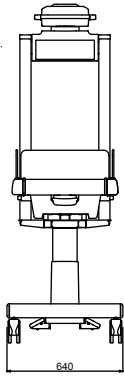


Wall Mount

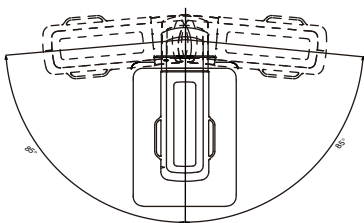
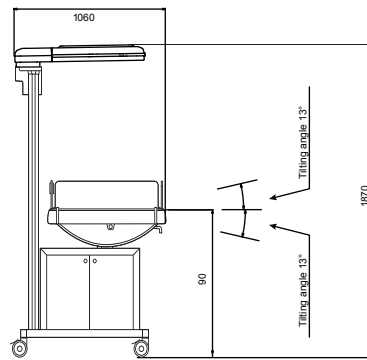
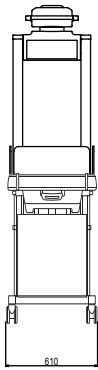
# Dimensional Drawing

(Unit : mm)

•Hi-Low/Tilt



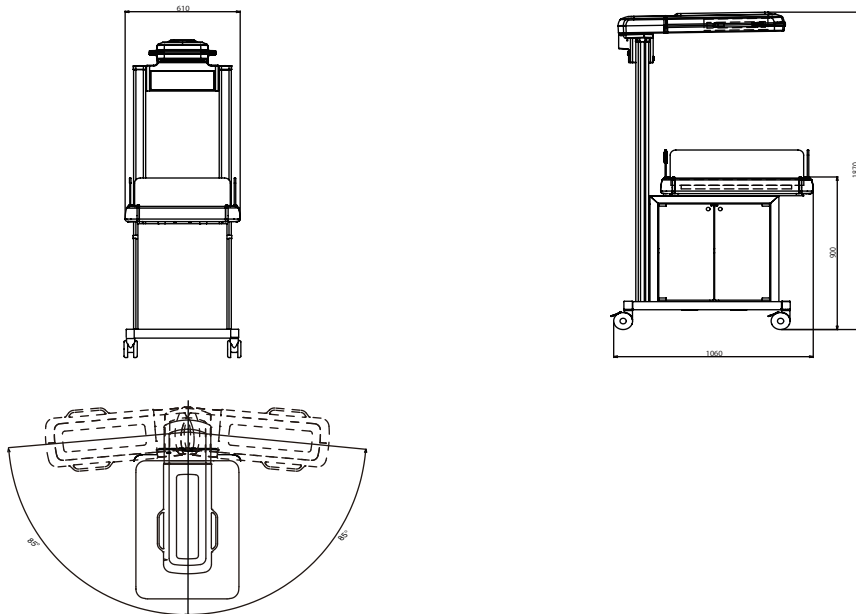
•Cabinet/Tilt



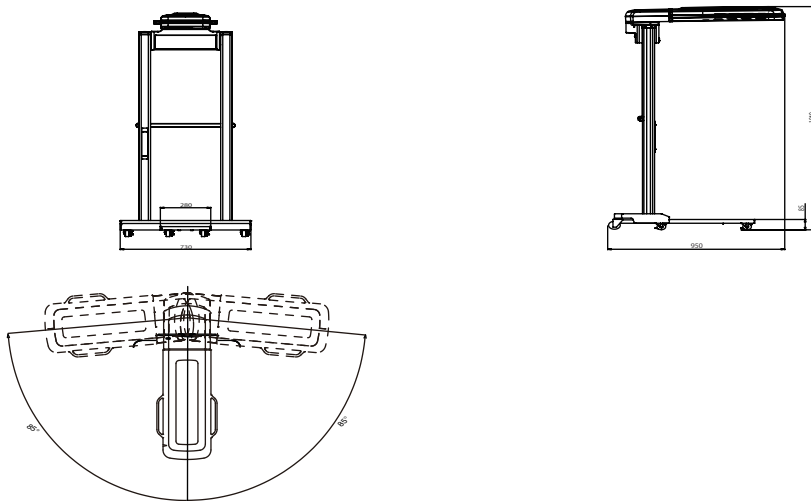
# Dimensional Drawing

(Unit : mm)

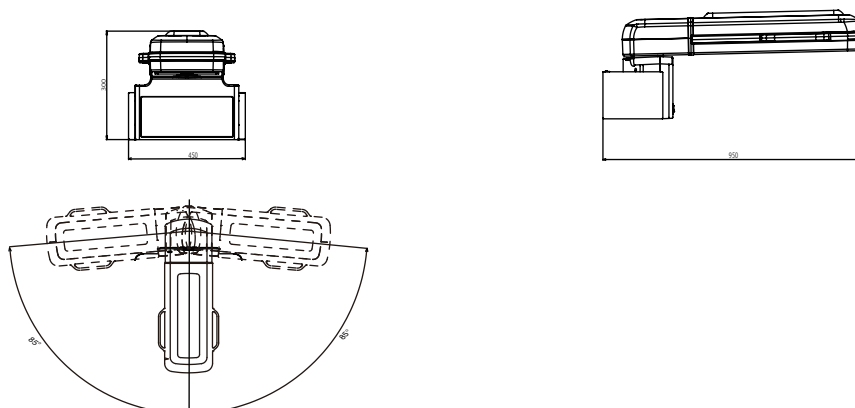
• Cabinet Steel / Wood



• Stand



• Wall Mount



## Accessories

	Hi-Low/Tilt	Cabinet/Tilt	Cabinet Steel/WoodTilt	Stand	Wall Mount
Skin Temp Probe, 5mm O.D. (Y)	1	1	1	1	1
Mattress Sheet	1	1	1	x	x
Cover Baby	1	1	1	1	1
Cord Holder	2	2	2	2	x
Dust Cover	1	1	1	x	x
Operation Manual	1	1	1	1	1

## Options & Supplies

Atom's code	Description	Atom's code	Description
60883	Skin Temp Probe, 5mm O.D. (Y)	60363	Resusci Flow w/ Blender/Rail Mounting Type
60882	Skin Temp Probe, 10mm O.D. (Y)	60362	Resusci Flow Rail Mounting Type
60312	Cover Baby 80 pcs/box	60982	Resuscitation Unit 104E Type Stand-Alone Type
60885	Connecting Cable (Y) for Dispo Skin Temp Probe	60366	CPR Timer
60884	Dispo Skin Temp Probe (Y) 10 pcs/box	60386	Patient Circuit for Resusci Flow (5 pcs/box)
61628	Pressure Dispersion Mattress for InfaWarmer i/SunFlower	60145	Face Mask for Neonatal (20 pcs/box)
60895	Mattress for SunFlower	60146	Face Mask for Infant (20 pcs/box)
60321	Mattress Sheet 5 pcs/pkg	60298	Test Bag, 50mL 5 pcs/pkg
60871	Tube Holder for Infa Warmer i/Sunflower/V-505	60141	Jackson Rees Circuit 0.5L for Neonatal w/ Suction Port
60337	Neo Sheets 100 pcs/box	60140	Jackson Rees Circuit 0.5L for Neonatal
67100	Baby Card Pink (50 pcs/box)	60142	Jackson Rees Circuit 1L for Infant w/ Suction Port
67101	Baby Card Blue (50 pcs/box)	61629	Tube for Pressure Measurement for Infa Warmer i/Sunflower
61071	Cord Holder for F-Rail (5 pcs/pkg)	61222	Safety Flow OX-248 Rail Mouning Type
60984	Shelf for SunFlower	60357	Safety Flow OX-240
60983	Drawer, 2 Layers for SunFlower	60241	Humidifier Bottle OX-230
60988	Drawer w/ Mounting Bracket, for Infa Warmer i/Sunflower	61226	Pressure Regulator OX-231 for Oxygen Cylinder, Screw Type
61627	Open Rack for Infa Warmer i/Sunflower	61227	Pressure Regulator OX-232 for Air Cylinder, Screw Type
61642	Drainage Hanger for Infa Warmer i/Sunflower (2 pcs/pkg)	60351	Hose Set for Oxygen and Air, 2m
60893	I.V Pole for F-Rail	60352	Hose for High-Pressure Oxygen, 1m
61616	MF-Rail for F-Rail (Common to Left & Right)	60353	Hose for High-Pressure Air, 1m
60306	MF-Rail, 7cm Pole Mounting Type	61225	Safety Flow OX-202 for Cylinder (w/ Pressure Regulator)
60367	MF-Rail, 26cm Pole Mounting Type	60895	Cylinder Rack for F-Rail
60899	Handle for F-Rail (2 pcs/set)	60846	Atom Head Frame
60350	Monitor Table for Philips Monitor for F-Rail	60220	OXYPOD II
60349	Monitor Table for F-Rail	60268	Neck Pad for OXYPOD II (5 pcs/pkg)
61617	Tray Set for F-Rail	60300	Connecting Hose for Piping
61618	Tray Set (S) for F-Rail	60356	Yox Model S401D (Liner Type), 500mL
60894	Basket w/ Arm for F-Rail	60355	Dispo Liner, 500mL for S401D, Suction Canister (30 pcs/box)
60369	Basket Rail Mounting Type	61619	Suction Canister, 500mL For S401D
61647	Weight Monitor Unit (w/ NAWI Verification)	61228	Yox Model S401A Aspirator, 1,200mL
61640	Weight Monitor Unit	62140	ATOM SYRINGE PUMP S-1235 AC220~240V *except for USA
60217	F-Rail Attachment	62145	ATOM SYRINGE PUMP S-1235 AC120V *except for USA
60218	Pole Attachment	60078	ATOM FEEDING SYRINGE HOLDER
60216	Infa Lite AC100~240V		
60361	BILI-THERAPY Spot Type Arm Type/for F-Rail/AC100~240V		
60360	BILI-THERAPY Spot Type Stand Type/AC100~240V		
60370	BILI-THERAPY Pad Type		
60375	BILI-Holder for BILI-THERAPY Pad Type		
60376	BILI-Stand for BILI-THERAPY Pad Type		
60371	Pad (L) for BILI-THERAPY Pad Type		
60372	Pad (S) for BILI-THERAPY Pad Type		
60373	Pad Cover (L) for BILI-THERAPY Pad Type (50 pcs/box)		
60374	Pad Cover (S) for BILI-THERAPY Pad Type (50 pcs/box)		
60289	Eye Mask, SS 50 pcs/pkg		
60288	Eye Mask, S 50 pcs/pkg		
60287	Eye Mask, M 50 pcs/pkg		
25440	Eye Mask, SS 5 pcs/pkg *except for USA		
25441	Eye Mask, S 5 pcs/pkg *except for USA		
25442	Eye Mask, M 5 pcs/pkg *except for USA		
68448	Phototherapy Analyzer II		

### Manufacturer: ATOM MEDICAL CORPORATION

3-18-15, Hongo, Bunkyo-ku, Tokyo, JAPAN  
<http://www.atomed.co.jp>

### Exporter: ATOM MEDICAL INTERNATIONAL, INC.

Iwakata Bldg., 3-18-16, Hongo, Bunkyo-ku, Tokyo, JAPAN  
 Phone: + 81 3 3815 2941 Fax: + 81 3 3812 9670/4080