

## Blood and Fluid Warmer



### Introduction:

By heating the continuous flow of liquid, the heat in the heat exchanger is transferred to the liquid in the pipe through the extended infusion pipeline to achieve the purpose of heating the liquid. The product is not in contact with the liquid. It is not used for the heating of analgesics, chemotherapy drugs, insulin and other drugs.

### Features:

- \* The temperature accuracy of instrument is  $\pm 0.1^{\circ}\text{C}$
- \* Preheating time is less than 2 minutes, rapid heating reduces waiting time
- \* With door opening alarm, high and low temperature alarm devices that trigger when the monitored temperature deviates by  $0.5^{\circ}\text{C}$  from the set point, with a flashing alarm light and an accompanying beep signal (BK-TW102).
- \* With high temperature alarm, low temperature alarm, system error alarm, overtime alarm, heating prompts (BK-TW101/201)
- \* The protection level against water intrusion is IPX I type, water drops falling vertically have no harmful effects
- \* With dual hardware and software triple temperature protection, ensuring safe use of the equipment
- \* The heating instrument operates at a noise level of  $\leq 65\text{dB(A)}$  during normal operation
- \* Two temperature units are available, which can be switched between degrees Celsius and degrees Fahrenheit
- \* Medical-grade heating silicone tubes ensure safe use, wrapping the entire pipeline to deliver effective temperature directly to the patient, with a variety of tube diameters and lengths available for selection (BK-TW101/201)

### Technical Parameters:

Model	BK-TW201	BK-TW101	BK-TW102
Display	LCD display		LED display
Temp. Range	32~42°C		RT+5~45°C
Temp. Resolution	0.1°C		
Temp. Fluctuation	$\pm 0.5^{\circ}\text{C}$		
Temp. Uniformity	/		$\pm 1.0^{\circ}\text{C}$
Preheating Time	$\leq 2\text{min}$		$\leq 2\text{min}$ (From $25\pm 2^{\circ}\text{C}$ to $35^{\circ}\text{C}$ )
Environment Temperature	5~40°C		5~30°C
Temp. Error	$\pm 0.5^{\circ}\text{C}$		$\pm 1.0^{\circ}\text{C}$
Timing Range	0~99h/Continuous		
Consumption	180W	120W	85W
Power Supply	AC 110/220V, 50/60Hz		
External Size (L*W*H)	104*45*170mm	94*45*170mm	77*35*177mm
Packing Size (L*W*H)	240*225*220mm		250*205*100mm
Net Weight	0.8kg	0.7kg	0.5kg
Gross Weight	2.0kg	1.9kg	1.1kg



### Introduction:

This product is primarily used for warming and maintaining the temperature of fluids (Excluding analgesics, chemotherapy drugs and insulin) administered to the human body. (Non-contact with blood or medication)

### Introduction:

- \* BK-TW110 is single-channel blood and fluid warmer, BK-TW210 is dual-channel blood and fluid warmer.
- \* Dry heating method, short preheating time, rapid heating.
- \* High-quality heating tube assembly, full-wrapped heating, fast heating in cold environment.
- \* Heating tube assembly is plug-and-play, convenient and fast.
- \* Directly heat conventional blood transfusion and infusion lines, no special consumables required, cost saving.
- \* Real-time display of set temperature, real-time temperature, alarm information, working status, etc.
- \* With over temperature alarm, under temperature alarm, no liquid alarm function.

### Technical Parameters:

Model	BK-TW110	BK-TW210
Channel Count	Single-channel	Dual-channel
Adjustable Temp. Range	33.0~41.0°C, continuously adjustable, increase rate 0.1°C	
Temp. Accuracy	0.1°C	
Preheating Time	$\leq 2\text{min}$ (From $20^{\circ}\text{C}$ to $36^{\circ}\text{C}$ )	
Display	LED	
Display Information	Heating time, set temperature, heating temperature, alarm information indication	
Inner Diameter of Heating Tube	Standard: 3.5~5mm Optional: 6~7mm	
Safety Control	The system has built-in alarm test function, and the alarm function can be tested on the panel to see if it is normal	
Power-off Protection	When the temperature exceeds $42^{\circ}\text{C}$ , the system will automatically stop heating with sound and light alarm	
Under Temperature Alarm	When it is lower than $32^{\circ}\text{C}$ , the system will give a sound and light alarm to indicate low temperature	
Heating Tube Structure	Three-cavity silicone flexible heating sleeve, integrated with 4 sets of heating wires, two sets of independent temperature sensors	
Power	60VA	80VA
Power Supply	AC 100~240V, 50~60Hz	
External Size (W*D*H)	172*95*175mm	195*115*175mm
Packing Size (W*D*H)	250*220*230mm	
Net Weight	1.7kg	2.3kg
Gross Weight	2.1kg	2.7kg