



THE TOP IN QUALITY
for all areas of healthcare

TOP INFUSION PUMP TOP-2500



THE NEW STANDARD

Proposal of a simple and easy-to-use INFUSION PUMP



Step-by-step operation from top to bottom

A series of operations can be performed smoothly from turning on the power to starting liquid transfer.



Key light , Door light turn on

It supports work in dark spaces at night.



Smooth and clean shape

It has a shape with reduced irregularities and grooves to facilitate regular cleaning.

Selectable color variations

You can choose from three color variations.



Show remaining time

You can display the remaining time until the infusion is completed. (When entering the planned amount)

Upstream blockage detection

It detects and warns of blockages at the top of the pump body, so it can be used more safely.

Specification



General name	General-purpose Infusion Pump	
Brand name	TOP INFUSION PUMP TOP-2500	
Model	TOP-2500	
Power supply	Commercial power supply : 100 to 240 V AC ±10% 50/60 Hz Internal Battery: Rechargeable 12 V DC, 1800 mAh, NI-MH battery (Model: BP-23) Continuous Use Time: Approx. 4 hours (25 mL/h Infusion with new, Fully Charged Battery)	
Input Current	AC power supply operation: 0.3 A	
Available Infusion Sets	Designated Infusion Set, General 20 drops/mL, General 60 drops/mL	
Flow Rate Setting Range	1 to 999 mL/h (Designated 20 drops Infusion Set) 1 to 150 mL/h (Designated 60 drops Infusion Set) 1 to 360 mL/h (General 20 drops/mL Infusion Set) 1 to 150 mL/h (General 60 drops/mL Infusion Set)	
Purge Flow Rate	Maximum flow in each Flow Rate Setting Range	
KVO Flow Rate Range	1 to 10 mL/h (1 mL/h steps)	
Volume Limit Range	1 to 9999 mL (1 mL/h steps)	
Total Volume Range	0 to 9999 mL (1 mL/h steps)	
Infusion accuracy	Flow Rate Accuracy	Designated Infusion Set (H Series): ±5%*1 General Infusion Set: ±10% (using Distilled Water or physiological saline)*2 *1 Accuracy and operation environment each hour after the start hour when using a specified Infusion Set shall conform to JIS standards.
	Drip Accuracy	±2%*2 *2 Drip Accuracy for 300 or more
Occlusion Detection Pressure*3	4 Steps Selection (when Designated Infusion Set is selected) PrdE 3: High (150 kPa max.) PrdE 2: Medium (120 kPa max.) PrdE 1: Low (80 kPa max.) PrdE 0: Lowest (40 kPa max.)	
	2 Steps Selection (when general Infusion Set is selected) PrST 1: High (150 kPa max.) PrST 0: Low (80 kPa max.)	

*3 Setting values to be switched by the Administrator with reference to the Administrator Manual.

Air-in-line Detection Sensitivity*3		3 Steps Selection Air 0: High (Alarm issued when approx. 50 μ L Air Bubble detected) Air 1: Medium (Alarm issued when total detected Air Bubble volume over 15 minutes exceeds approx. 0.1 mL) Air 2: Low (Alarm issued when total detected Air Bubble volume over 15 minutes exceeds approx. 1 mL)
Alarms	High Priority Alarms	Air Bubble, Empty Container, Flow Error (Over Drop, Under Drop), Free Flow, Downstream Occlusion, Upstream Occlusion, Auto Power OFF, Door Open, Drop Sensor, Infusion Complete, Power Loss, System Error
	Low Priority Alarms	Battery Alarm, Flow Rate Is Not Set, Check the Set Value, Prior End of Infusion, No Action with the Pump
	Information Signals	Door Sensor Check, Switching Power, Maintenance Timer, Stand-by End, Battery Malfunction

Special Features	History	: Up to 300 items can be viewed in the Operation History.
	Key-Lock Function	: Disables all Key operations except the Power Key during Infusion.
	KVO Function	: After reaching the Infusion Volume Limit, continue Infusion at the KVO Flow Rate to prevent Thrombosis.
	Nurse Call Signal Is Output	: Connecting an External Communication Cable to the unit allows an Alarm Signal to be output when an alarm occurs.
	Auto Power OFF	: When running on the Internal Battery, the power is turned off automatically if the unit is left for about 3 minutes after a No Action with the Pump Alarm occurs.
	Key Light	: The Keys light when operated.
	Door Light	: The door light turns on when the door is open.
	Total Volume Display	: Displays the Total Volume in the range from 0 to 9999 mL. (1 mL steps)
	Maintenance Timer	: The Maintenance Timer lamp lights when the set number of days is exceeded.
	Battery Refresh	: Performs Refresh Charging to maintain the performance of the Internal Battery.
	Infusion Set Limit function	: Limits the types of Infusion Sets that can be selected.
	Stand-by Function	: Temporarily extends the time until the No Action with the Pump Alarm is generated.
	Maintenance Mode	: Makes it easy to check the Infusion accuracy and the status of various sensors.
	Buzzer Tone Setting	: Sets the buzzer volume in 3 steps.
	Buzzer Setting	: Select whether the Wait Tone and Key Operation Tones are heard.
	Infusion Remaining Time Function	: Used to check the Infusion time remaining. (When Setting the Volume Limit)
	Time Setting	: Sets the Current Time.
	Clear Total Volume	: Zeroes the Total Volume.
	Purge	: Increases the Infusion rate for Priming.

*3 Setting values to be switched by the Administrator with reference to the Administrator Manual.

Special Features	External Communication	: Connecting the unit to a computer with an External Communication Cable allows data to be output from the pump. (For details, refer to the Administrator Manual.)
	Anti Bolus	: Reverses the motor direction when a downstream Occlusion Alarm occurs to reduce the temporary Bolus Volume due to the Occlusion. (When Designated is set)
	Repeat alarm function	: Sounds the Alarm tone again if the unit is left for more than 2 minutes without canceling the Alarm after the Alarm tone is silenced
Operating conditions	Ambient Temperature: 5 to 40°C (5 to 30°C during Internal Battery charging) Relative Humidity: 20 to 90% (no condensation) Ambient Pressure: 70 to 106 kPa	
Transportation and Storage Condition	Ambient Temperature: -10 to +45°C Relative Humidity: 10 to 90% (no condensation) Ambient Pressure: 50 to 106 kPa	
Service Life	6 years (Self-certification Using TOP Corporation Data) However, this is the Service Life of the product after specified maintenance and replacement of consumables.	
Classification	Classification by electric shock protection: Class II  and Internally Powered Equipment Classification of attachments by degree of electric shock protection: Antifibrillation Type CF applied parts  Classification by degree of protection against harmful ingress of water: IP32	
Dimensions	92 (W) x 181 (H) x 189 (D) mm	
Mass	Approx. 1.9 kg	
Accessories	AC Power Cable 1 Drop Sensor 1	Operation Guide 1 Administrator Manual 1
Material Used	Case	: ABS resin
	Door Handle, Clamp Release Lever	: Glass Fiber-reinforced Nylon
	Operation Panel	: Polyester Film

H series TOP INFUSION SET

TOP INFUSION SET (for INFUSION PUMP) is an INFUSION SET developed exclusively for TOP INFUSION PUMP. The inner diameter of the tube is stricter than that of general products (compared to our company), and the material with high resilience is used, enabling stable infusion with an INFUSION PUMP.



Drop Sensor

It can be used a general-purpose infusion set by attaching a drop sensor.. (Dripping control method)



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