

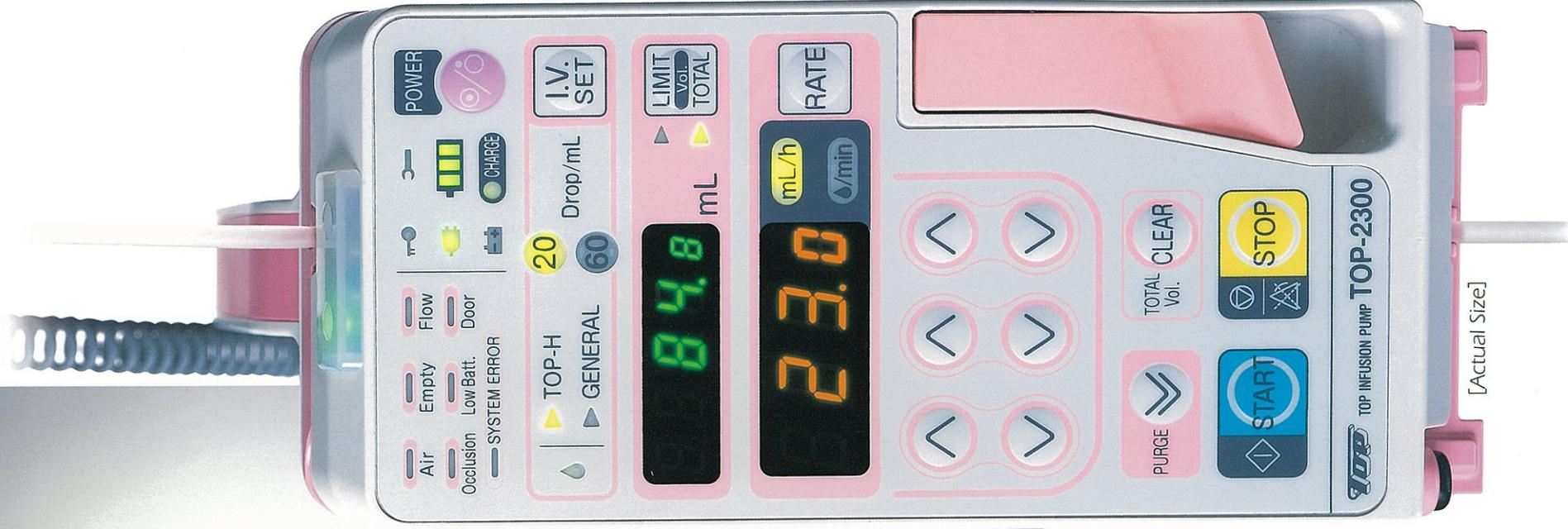


TOP Infusion Pump TOP-2300

**Easy to use and fully-featured in
a compact body.
That vision is now a reality.**



**Squeezes a variety of functions into a small body.
The control panel has a comfortable,
easy-to-use design.**



Compact

Pump Body is Slim and Compact

The small size – 84 mm wide x 190 mm high x 185 mm deep – makes the pump easy to hand-carry, and is convenient for use in multi-pump arrays.

**High Performance
in a Compact Body**

[Actual Size]

TOP Infusion Pump TOP-2300

Easy-to-Use 1

Large Control Panel and Easy-to-Read Display
The display and control panel take up most of the front face of the pump. This provides ample room, both in terms of the size of the display and the layout of the control keys, reducing stress during key operation.

Easy-to-Use 2

Smooth Downward Sequence of Operations
Turn on the power, select the number of drops for the IV set, set the volume limit and flow rate, then press the Start key. All in one smooth downward sequence.

Easy-to-Use 3

Alarm Displays are User Friendly
Independent notification of major alarms by light indicators and English-language displays makes the alarms easy to be understood and helps prevent medical errors.

A Variety of Features

Runs 4 Hours on Internal Batteries

The pump can operate for up to 4 hours on the internal battery (assuming infusion at 25 mL/h using a new, fully charged battery), increasing the range of application.

Flow Rate Settings in Drops/min or mL/h

The flow rate can be set as a drop count (drops/min) or in mL/h.

No Need for a Ground

This is a Class II device which does not need to be connected to a protective ground.

History Function

Allows up to 300 events in the past operating history, including dosing schedules and alarm incidents, to be verified.

Lighted Status Indicators

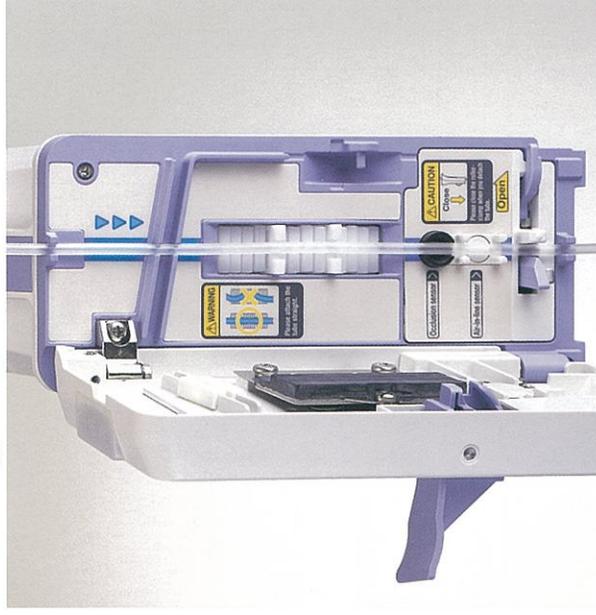
Uses status indicators at the top of the unit which enable the operating status of the pump to be checked even at a distance.



Easy-to-Use 4

IV Set Attaches Easily

Mounting the IV set is easy. Simply attach the tubing so that it runs straight through the center portion of the mounting panel.



Micromode

With the use of a special-purpose IV set (H-type), the micromode enables precise, continuous microinfusion, allowing the infusion of highly concentrated medications and making the pump suitable also for pediatric use.

Choose from Four Colors

Available in a choice of four colors – purple, champagne gold, pink and green. Handy for color coding by medical department.



- A key lock function renders keys other than the power key inoperable.
- A battery refresh function reduces the memory effect in the internal battery.
- A maintenance timer function provides lighted notification of inspection periods.
- Non-alarm buzzers can be muted.
- Keep vein open function can be set to a desired flow rate (from 1 to 10 mL/h).
- Alarm sound can be selected from among four different sounds.
- To help ensure restful sleep after the lights have been turned off, the luminosity of the indicators adjusts automatically to the surrounding brightness.

TOP Infusion Pump TOP-2300

Specifications

Name	TOP Infusion Pump TOP-2300
Type	Infusion pump
Applicable IV set	TOP-H series IV set, 20 drops/mL or 60 drops/mL standard IV set
Flow rate range	mL/h (1 mL/h increments) 1 - 600 mL/h (TOP-H series IV set) 3 - 300 mL/h (20 drops/mL standard IV set) 1 - 150 mL/h (60 drops/mL standard IV set) drops/min (1 drop/min increments) 1 - 200 drops/min (TOP-H series IV set) 1 - 100 drops/min (20 drops/mL standard IV set) 1 - 150 drops/min (60 drops/mL standard IV set) Micro mode (0.1 mL/h increments) 0.1 - 99.9 mL/h (TOP-H series IV set)
Purge flow rate	Maximum flow rate of IV set used
KVO flow rate range	Normal mode: 1 - 10 mL/h (1 mL/h increments) Micro mode: 0.1 mL/h (When having set below 0.9 mL/h)
Volume limit range	Normal mode: 0.1 - 9999 mL (1 mL increments) Micro mode: 0.1 - 999.9 mL (0.1 mL increments)
Total volume range	Normal mode: 0 - 9999 mL (1 mL increments) Micro mode: 0.0 - 999.9 mL (0.1 mL increments)
Infusion accuracy	mL/h Normal mode: ±7%: Selecting TOP-H series IV set ±10%: Selecting 20 drops/mL, 60 drops/mL standard IV set with physiological salt solution Micro mode: Selecting TOP-H series IV set ±7% (Setting 1.0 - 99.9 mL/h), ±10% (Setting 0.1 - 0.9 mL/h)
Occlusion detection pressure	drops/min ±2% (at ≥ 300 drops) 4 steps selection (Selecting TOP-H series IV set) P3: Under 150 kPa Under 1100 mmHg P2: Under 120 kPa Under 900 mmHg P1: Under 80 kPa Under 600 mmHg P0: Under 40 kPa Under 300 mmHg When the flow rate is 0.9 mL/h or less, the equipment operates by "P10"
Air-in-line detection	2 steps selection (Selecting 20 drops/mL, 60 drops/mL standard IV set) P21: Under 150 kPa Under 1100 mmHg P20: Under 80 kPa Under 600 mmHg 3 steps selection Ar0: High Approx. 0.1 mL / 15 minutes Ar1: Medium Approx. 0.1 mL / 15 minutes Ar2: Low Approx. 1 mL / 15 minutes When the flow rate is 10 mL/h or less, the equipment operates by "Ar1" even if set as "Ar2"
Alarm	Air-in-line, Empty container, Flow rate error, Free flow, IV set error, Occlusion, Low battery, Auto Power OFF, Battery connection, Battery malfunction, Door open, Drop sensor, Reminder, Check setting, Infusion complete, Power source switched, System error
Special features	Keep Vein Open (KVO): After programmed infusion has been delivered, infusion is continued at KVO flow rate to prevent clot formation. Auto power OFF: If the system is left in stand-by state or alarm state for approximately three minutes while it is operated from the internal battery, the buzzer will sound. If left in this state for another three minutes, the power will be shut off automatically. Repeat alarm: If two minutes elapsed without resetting the alarm after it was silenced, the alarm will sound again. Data storage setting: Flow rate set, Volume limit / Total volume can be stored. Buzzer setting: Presence / Absence of wait tone and operation tone can be specified. Power source switched: The system has entered the build in battery operation mode when power is no longer supplied from the AC / DC power source. Key-lock function: During infusion, places the system in the Key Lock state. History function: History of pump operation can be checked when infusion started and stopped. Maintenance timer: Maintenance timer indicator illuminates, when the setting day has passed.
Power supply	AC power supply: AC 100 - 240 V ± 10 % 50/60 Hz External DC power supply: DC 15 V ± 10 % Internal battery: Rechargeable, DC 12 V 1800 mAh Ni-MH (Model: BP-23) Battery life: Approx. four hours (at flow rate of 25 mL/h using new battery in fully recharged state.)
Input Current	AC power supply: 0.3 A DC power supply: 1.5 A
Operating conditions	Environmental temperature: 5 - 40°C (While charging the internal battery: 5 - 30°C) Relative humidity: 20 - 90 % (No condensation) Atmospheric pressure: 70 - 106 kPa
Transportation & storage condition	Environmental temperature: -10 - 45°C Relative humidity: 10 - 90 % (No condensation) Atmospheric pressure: 50 - 106 kPa
Classification	Class II and internally powered equipment, Type CF, IPX1 (Drip proof)
External dimensions	84(W) x 190(H) x 185(D) mm
Weight	Approx. 2.0 kg
Accessories	AC power cable x 1, Drop sensor x 1, Operation Guide x 1

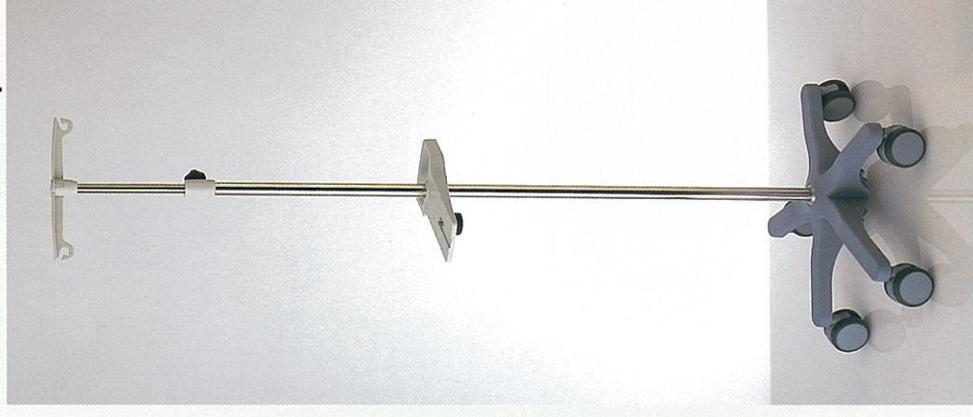
Distributor:



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TOP Infusion Stand Type SG for TOP Infusion Pumps



TOP IV Sets, H-series

These IV sets have been developed specifically for use with TOP infusion pumps. The tubing inner diameter is held to a closer tolerance than in general-use TOP sets and the tubing itself is made of a highly resilient material, enabling more stable infusion.