

Specifications

Description	TOP Syringe Pump TOP-5530
Model	TOP-5530
Power Supply	AC power supply: AC100-127V±10% 50/60Hz (for 100V Area) AC200-240V ±10% 50/60Hz (for 200V Area) DC power supply: DC12V ±5%(type : ST55-4) Internal battery: DC3.6V 1500mAh Ni-MH (type : BP-55) Battery life is approximately 12hours (at flow rate of 5mL/h using new battery in fully recharged state) Uses four LR6 type, AA size alkaline batteries DC6V Battery life is approximately 24 hours (at flow rate of 5mL/h using new batteries)
Input Current	AC power supply: 0.1A (for 100V Area), 0.05A (for 200V Area) DC power supply: 0.4A
Applicable Syringe	TOP TERUMO, NIPRO, JMS, B-D, MONOJECT (except 50mL syringe), and B.BRAUN syringes, plus one additional syringe registered by user per syringe size (10mL, 20mL, 30mL, and 50mL) 1% Diprivan Injection-kit, 20mL, 50mL
Flow Rate Range	0.1~300.0mL/h (10mL syringe) 0.1~400.0mL/h (20mL syringe) 0.1~500.0mL/h (30mL syringe) 0.1~1200.0mL/h (50mL syringe) 0.1~1200.0mL/h (1% Diprivan Injection-kit, 20mL, 50mL) (Settings adjustable in 0.1 mL/h increments) Factory default value: 150.0mL/h
Purging	Approximately 330mL/h (TOP 10mL syringe) Approximately 620mL/h (TOP 20mL syringe) Approximately 740mL/h (TOP 30mL syringe) Approximately 1200mL/h (TOP 50mL syringe)
KVO Rate Range	0.1~5.0mL/h (0.1mL/h step) Factory default value: 0.1mL/h
Volume Limit Setting	0.1~1000.0mL
Total volume display range	0.0~1000.0mL
Infusion Accuracy	Mechanical accuracy: ±1% Accuracy including the syringe: ±3% * For at least one hour infusion at flow rate of at least 1.0mL/h.
Occlusion Detection	Can be set to any of four levels High: 93±33 kPa (700±250mmHg/0.95±0.34 kgf/cm ²) Middle: 67±27 kPa (500±200mmHg/0.68±0.27 kgf/cm ²) Low: 40±20 kPa (300±150mmHg/0.41±0.2 kgf/cm ²) Very low: 20±10 kPa (150±75mmHg/0.2±0.1 kgf/cm ²) * When using TOP syringe (50mL) for TOP syringe pump
Overload Detection	Approximately 20N (2.0 kgf) or more: (10 mL syringe) Approximately 40N (4.0 kgf) or more: (20 mL syringe) Approximately 55N (5.5 kgf) or more: (30 mL syringe) Approximately 80N (8.0 kgf) or more: (50 mL syringe)
Alarms / Warnings	High priority alarm: Occlusion, Overload, Infusion complete, Power off, Power loss, Malfunction, Operation reminder, Syringe barrel clamp disengaged, Syringe plunger disengaged, Syringe barrel flange disengaged Low priority alarm: Low volume, No battery, Low battery Information signal (warning): Sensor Check, No rate, No volume limit, Set value check, Infusion complete(KVO), Maintenance timer, Standby mode, Power supply switched
Functions	Auto power off, Alarm reminder, Power supply switch alarm, KVO function, Standby function, Buzzer setting, History function, Key lock function, Syringe brand limit function, Volume limit display switching function, Battery refresh function, Maintenance timer function, Flow rate upper limit value setting function, User syringe registration function
Operating Conditions	Ambient temperature: 5~40°C, Relative humidity: 20~90% (noncondensing) Atmospheric pressure: 70~106kPa
Transport and Storage Conditions	Ambient temperature: -20~45°C, Relative humidity: 10~95% (noncondensing) Atmospheric pressure: 50~106kPa
Service Life	6 years (Based on self certification using TOP corporation data) assuming inspection and maintenance are carried out as indicated and consumable parts are replaced as needed.
Classification	Classification by the form of protection against electric shock: Class II □, Internal powered equipment Classification of attaching part by the degree of protection against electric shock: Type CF ▽ Classification by the degree of protection against harmful entry of water: IPX2 (Drip proof)
Fuse	T0.2AL (for 100V Area), T0.1AL (for 200V Area)
External Dimensions	320mm (Width) x 90mm (Height) x 160mm (Depth)
Weight	Approximately 2.0 kg
Accessories	AC power cable...1, Operation Guide...1
Composition	Case: ABS (Acrylonitrile Butadiene Styrene) Syringe barrel clamp, Syringe plunger slider: Glass fiber-reinforced Polycarbonate(50%) Operation panel: Polyester film LED Cover: Methyl methacrylate polymer

● Product specifications and appearance are subject to change without prior notice.

Distributor:



TOP CORPORATION

19-10 Serjunakai-cho, Adachi-ku, Tokyo 120-0035, Japan
Tel: 81 (Japan)-3-3882-3101 Fax: 81 (Japan)-3-3881-8163

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TOP SYRINGE PUMP TOP-5530

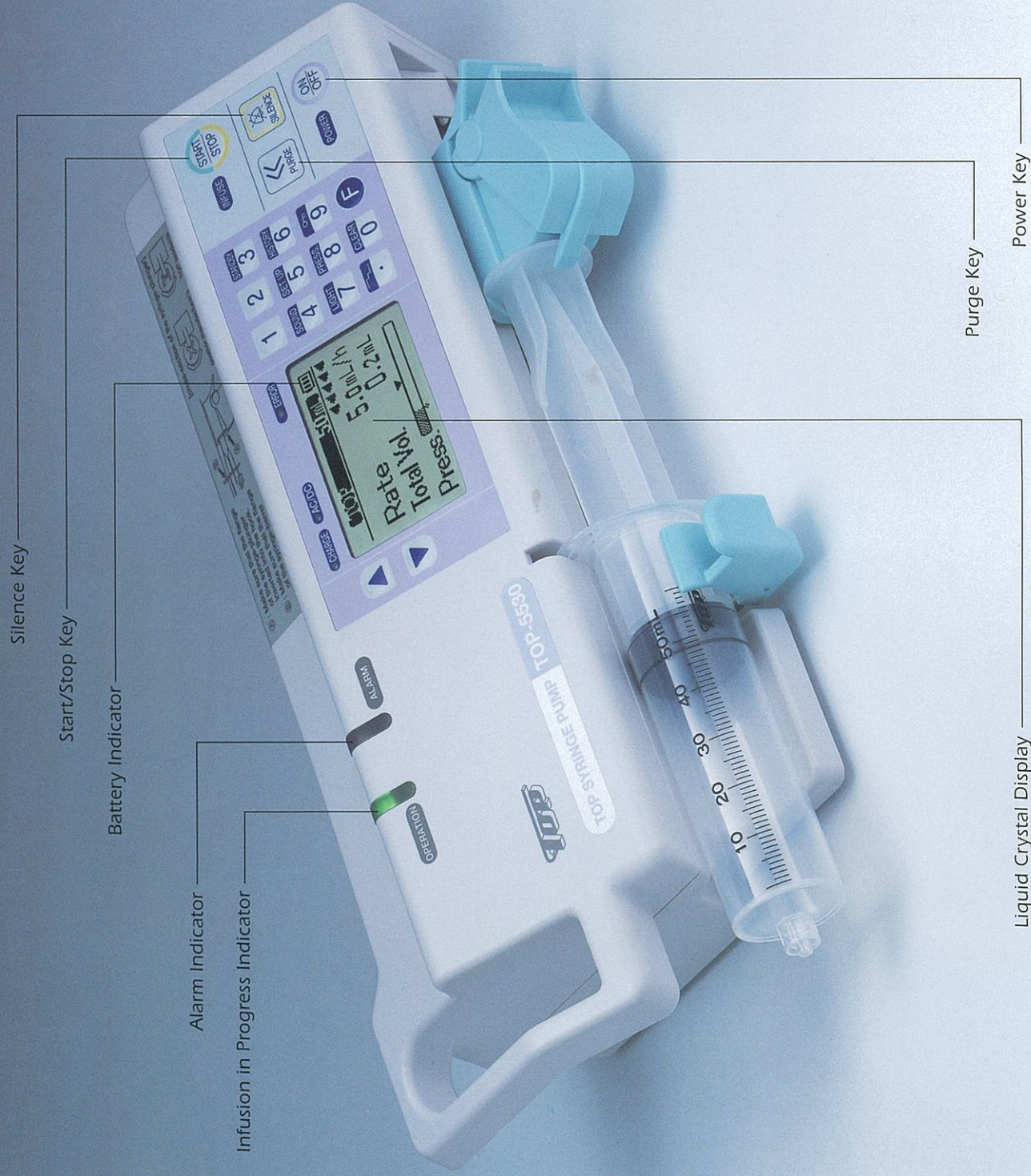
A syringe pump with outstanding capabilities and ease of use in the clinical setting, whether on the general ward or when administering an anesthetic.



Allows dosage to be changed while continuing infusion.

**TOP SYRINGE PUMP
TOP-5530**

Contributes to better clinical management, such as control of the depth of anesthesia.



Flow Rate Can Be Changed While Continuing Infusion

The target blood concentration can be smoothly maintained or altered by changing the flow rate without stopping infusion. This enables the appropriate general anesthetic state to be achieved and helps make the depth of sedation controllable during artificial respiration in the ICU.



(Before the change)



(After the change)

Compatible with Range of Syringe Makes and with Propofol Kit

In addition to TOP syringes, this pump can use 10 mL, 20 mL, 30 mL and 50 mL syringes made by TERUMO, NIPRO, JMS, B-D, MONOJECT (except 50mL syringe), and B.BRAUN. Also allows the direct use of a propofol kit (1% Diprivan® Injection Kit) with 20 mL or 50 mL syringe. Moreover, one additional syringe of any make can be registered for use per syringe size.

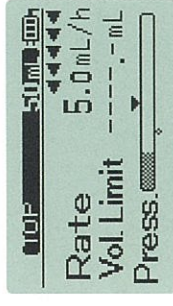
Internal Battery or AA Size Alkaline Batteries Can Be Used

Fluid delivery can be carried out continuously not only on AC power, but for at least 12 hours on the internal battery or at least 24 hours on AA size alkaline batteries.*

*At a flow rate of 5 mL/h using new internal battery in a fully charged state or using fresh alkaline batteries.

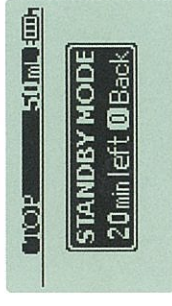
Occlusion Pressure Trend Monitor

There are four occlusion detection pressure levels, including "Very Low." The occlusion pressure trend monitor is graphically displayed, enabling the internal pressure state of the infusion line to be intuitively grasped.



Standby Function

By placing the pump in the standby mode, such as before surgery, the Operation Reminder alarm can be temporarily deactivated.



Battery Refresh Function

The pump automatically carries out a refresh function to maintain the performance of the internal battery. Rapid charging of the battery from a fully discharged state reaches completion in about 8 hours.



History Display Function

Enables operating history, including start/stop, alarms and power on/off, to be verified.

Key Lock Function

Disables key operation during infusion. Only the Power key, Illumination key and Silence key can be operated during Key Lock.

Display Limiting Function

Makes it possible to turn off the display of a syringe manufacturer unlikely to be used or to turn off the display of a volume limit. This function should simplify pump operation up until the start of infusion.

On-site Clinical Capabilities