

Terufusion®

Infusion pump TE-LM800

Product Information Card



**MID
PRESS**

TERUMO®

Technical Data

Product Specifications	
Type of device	Volumetric infusion pump
Classification	Class I and internally powered equipment, Type CF (according to IEC/EN 60601-1) Class IIb medical device (according to Council Directive 93/42/EEC)
Moisture protection	IP 22
EMC	IEC/EN 60601-1-2, IEC/EN 60601-2-24
Operating conditions	5 - 40°C Relative humidity: 20 - 90% without condensation
Size / Weight	253mm (W) x 120mm (H) x 102mm (D), Approx. 2kg <i>(excluding protrusions)</i>
Performance Data	
Compatible disposables	Specified infusion sets and specified blood transfusion sets (TERUMO) <i>(with Free Flow Protection)</i>
Flow rate setting range	When not using the drip sensor 0.10 to 1200.00 mL/h When using the drip sensor 0.10 to 1200.00 mL/h (when setting is 20 drops/mL) 0.10 to 300.00 mL/h (when setting is 60 drops/mL)
Flow rate display change	0.10 mL/h step (0.10 to 100.00 mL/h) * 1.00 mL/h step (100.00 to 1200.00 mL/h) * <i>*: Step can be used when flow rate is set by the Dial. (It will be 0.00 mL/h when the power is turned on)</i>
Flow rate accuracy	<u>Pump-specific infusion sets (high precision type):</u> Within ± 3% (The hourly precision after one hour has passed since the start of solution delivery, in the case where water or a physiological saline solution is used at a constant flow rate of 1.00 mL/h or more (ambient temperature: 23±2°C) according to IEC 60601-2-24 standard) <u>Pump-specific infusion sets and pump-specific blood transfusion sets:</u> Within ± 5%* (The hourly precision after one hour has passed since the start of solution delivery, in the case where water or a physiological saline solution is used with a specified infusion set or blood transfusion set (hereinafter called "infusion set") at a constant flow rate of 1.00 mL/h or more (ambient temperature: 23±2°C) according to IEC 60601-2-24 standard) <i>*: The flow rate accuracy is approx. -10% under the lower temperature (approx. <10°C)</i> The flow rate accuracy of the PVC-free infusion sets is ± 10% at a flow rate of 500 mL/h or more.
Purge	Approx. 500 mL/h
Hands on bolus	100.00 to 1200.00 mL/h (when setting is 20 drops/mL) 100.00 to 300.00 mL/h (when setting is 60 drops/mL) (In units such as mL and mg/kg etc.)
Hands free bolus	0.01 to 10.00 (0.01 step) 10.00 to 100.00 (0.10 step) 100.00 to 999.00 (1.00 step) (In units such as mL and mg/kg etc.)
Advanced dose mode	Interval / Intermittent Mode: The specified dosage rate is delivered at the specified regular intervals. Multi-Step Mode: The speed of solution delivery increases or decreases at the specified levels (up to 10 levels). Delayed start: solution delivery starts after the specified time has elapsed. To be able to use the advanced mode, the drug library needs to be installed. To install the drug library, separate dedicated software is required.
Combination dose mode	Solo Piggy, Pair Piggy
Flow rate calculation	Through setting of volume and time

Performance Data	
Dose mode	mL/h mode, µg/kg/min mode, mg/kg/h mode, Library mode
Dose setting units	mL/h, munit/kg/min, mmol/kg/h, mg/day, mEq/min, ng/kg/min, munit/kg/h, mmol/kg/day, g/min mEq/h, ng/kg/h, munit/kg/day, mol/kg/min, g/h, mEq/day, ng/kg/day, unit/kg/min, mol/kg/h, g/day, mmol/min, µg/kg/min, unit/kg/h, mol/kg/day, munit/min, mmol/h, µg/kg/h, unit/kg/day, ng/min, munit/h, mmol/day, µg/kg/day, kunit/kg/min, ng/h, munit/day, mol/min, mg/kg/min, kunit/kg/h, ng/day, unit/min, mol/h, mg/kg/h, kunit/kg/day, µg/min, unit/h, mol/day, mg/kg/day, mEq/kg/min, µg/h, unit/day, g/kg/min, mEq/kg/h, µg/day kunit/min, g/kg/h, mEq/kg/day, mg/min, kunit/h, g/kg/day, mmol/kg/min, mg/h, kunit/day
KVO ¹	Allows to set the KVO flow rate within the following ranges When not using the drip sensor (optional accessory): 0.10 to 3.00 mL/h When using the drip sensor (optional accessory): - if using an infusion set of 20 drops/mL: 3.00 mL/h (Fixed) - if using an infusion set of 60 drops/mL: 1.00 to 3.00 mL/h
Standby (Pause) ¹	Default: 24 hours Configurable up to 24 hours with 10 minutes intervals
Operator Interface	
User interface	Standardized user interface for Terufusion pump series
Display	4.3 inch full color LCD
Keypad	7 keys: Power, Start, Stop, Purge, Display Select, Back/Mute, Confirmation
Safety System	
Drug library	Up to 3000 drug entries. Up to 30 user defined profiles. To be able to use the drug library, separate dedicated software is required - please contact your local Terumo office.
Free flow protection	Anti-free flow clip installed inline
Occlusion detection pressure	Upper occlusion detection pressure: -100 to -30 kPa Lower occlusion detection pressure: 30 to 120 kPa (set value) The lower occlusion detection pressure can be set in 10 levels
Air-in-line detection	Yes
Drop control	Optional: Drip sensor available
Alarm indicators	Alarm signal with clear text on LCD
Alarms	Upper Occlusion alarm, Lower Occlusion alarm, Pressure alarm, Air-in-line alarm, Door alarm, Flow Rate Abnormality alarm, Free Flow alarm, Line Empty alarm, Drip Sensor Dislocation alarm, Battery alarm, Re-alarm, Start Reminder, No Flow Rate alarm, No VTBI alarm, Flow Rate/VTBI Volume Judgment alarm, Completion alarm, Link Interruption alarm
Power Supply	
Power supply	AC 100-240V, 50-60 Hz Internal battery (Lithium ion battery)
Battery operating time	Approx. 5 hours (at 25 mL/h and 25°C with a new fully charged battery)
Battery recharging time	≥ 8 hours (when charged with AC power supply with the power turned off)
History and Interfaces	
History	Latest 10.000 events can be stored
Interface type	IrDA And Wireless LAN

¹ Special function that can be enabled by TERUMO trained service technicians by changing the internal settings of the pump

Technical Data

Product Codes			
With infrared communication and W-LAN function	Labeling	AC cord	Barcode
TE-LM800EN1	English	European G.B	4987350877253
TE-LM800EN2			4987350712608
TE-LM800DE1	German	European	4987350712622
TE-LM800FR1	French		4987350712646
TE-LM800IT1	Italian		4987350712660
TE-LM800IT3		Italian	4987350712684
TE-LM800NL1	Dutch	European	4987350712707
TE-LM800RU1	Russian		4987350712721
TE-LM800ES1	Spanish		4987350712745
TE-LM800SV1	Swedish		4987350712769
TE-LM800NO1	Norwegian		4987350712783
TE-LM800DA4	Danish	Danish	4987350712806
TE-LM800PL1	Polish	European	4987350712820
TE-LM800HU1	Hungarian		4987350712844
TE-LM800SK1	Slovak		4987350712868