

# Terufusion®

Infusion pump TE-LM700

## 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	For TE-LM700 without external communication (RS-232C): 253 mm (W)* <sup>1</sup> x 120 mm (H)* <sup>1</sup> x 102 mm (D)* <sup>2</sup> , Approx. 2.0 kg For TE-LM702 with external communication (RS-232C): 253 mm (W)* <sup>1</sup> x 120 mm (H)* <sup>1</sup> x 121 mm (D)* <sup>2</sup> , Approx. 2.0 kg <sup>*2</sup> : Excluding protrusions, <sup>*3</sup> : Excluding protrusions, pole clamp and moving range
Performance Data	
Compatible disposables	Specified infusion sets and specified blood transfusion sets (TERUMO) (with Free Flow Protection)
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) * *: 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)
Flow rate accuracy	<b>Pump-specific infusion sets (high precision type):</b> 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) <b>Pump-specific infusion sets and pump-specific blood transfusion sets:</b> 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) *: The flow rate accuracy is approx. -10% under the lower temperature (approx. <10°C) 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) (100.00 mL/h step)
Hands free bolus <sup>1</sup>	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.)
Flow rate calculation	Through setting of volume and time
KVO <sup>1</sup>	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): When using an infusion set of 20 drops/mL: 3.00 mL/h (fixed) when using an infusion sets of 60 drops/mL: 1.00 to 3.00 mL/h
Standby (Pause) <sup>1</sup>	Default: 24 hours Configurable up to 24 hours with 10 minutes intervals

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

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					
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, 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				
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	RS-232C (TE-LM702 only)				
Nurse call	RS-232C (TE-LM702 only)				
Product Codes					
Without RS-232 <sup>1</sup>	With RS-232 <sup>2</sup>	Labeling	AC cord	Barcode LM700	Barcode LM702
TE-LM700EN1	TE-LM702EN1	English	European G.B	4987350877215	4987350877239
TE-LM700EN2	TE-LM702EN2			4987350712325	4987350713728
TE-LM700DE1	TE-LM702DE1	German	European	4987350712349	4987350713742
TE-LM700FR1	TE-LM702FR1	French		4987350712363	4987350713766
TE-LM700IT1	TE-LM702IT1	Italian		4987350712387	4987350713780
TE-LM700IT3	TE-LM702IT3		4987350712400	4987350713803	
TE-LM700NL1	TE-LM702NL1	Dutch	European	4987350712424	4987350713827
TE-LM700RU1	TE-LM702RU1	Russian		4987350712448	4987350713841
TE-LM700ES1	TE-LM702ES1	Spanish		4987350712462	4987350713865
TE-LM700SV1	TE-LM702SV1	Swedish		4987350712486	4987350713889
TE-LM700NO1	TE-LM702NO1	Norwegian		4987350712509	4987350713902
TE-LM700DA4	TE-LM702DA4	Danish		Danish	4987350712523
TE-LM700PL1	TE-LM702PL1	Polish	European	4987350712547	4987350713940
TE-LM700HU1	TE-LM702HU1	Hungarian		4987350712561	4987350713964
TE-LM700SK1	TE-LM702SK1	Slovak		4987350712585	4987350713988

<sup>1</sup>: Without RS-232 connection. Without infrared communication/Wireless LAN functions.

<sup>2</sup>: With RS-232 connection. Without infrared communication/Wireless LAN functions.