

Technical Specification

IV set	PCV with automatic free flow protection; DEHP-free
Infusion fluid	No restriction, blood also acceptable
Flow rate	0.1 - 1200 ml/h, 0.1 ml/h increments up to 999.09 ml/h and above in ml/h, priming the line: 1200m/h
Infusion volume	0.1 - 20000 ml, 0.1 ml increments
Infusion time	1 min - 200 h, 1 minute increments
Bolus	Flow rate: Up to 1200 ml/h, 0.1 ml/h increments up to 999.9 ml/h and above in 1 ml/h; bolus volume: 1-500 ml Programmable volume (dose), time or flow rate: automatic and manual bolus; Flow rate: up to 1200 ml/h, 0.1 ml/h increments; Programmable volume (dose), time or flow rate 0 - 20.0 ml/h
Induction dose	±5% over 96h or 10 liters, according to IEC 60601-2-24
Keep Vein Open (KVO)	Downstream 11 levels: 0.1-1.2 bar (75-900 mmHg); Pressure measurement accuracy: ±15% but not lower than 0.1 bar
Flow rate accuracy	Upstream: automatic reduction of occlusion bolus; Graphic presentation of infusion pressure and set level (pictograms)
Occlusion pressure	Standard equipment, detachable
Drop Detector	Ultrasound, programmable sensitivity
Air Detector	- single bubble: 0.05±0.3 ml - accumulated: 0.1±1.5 ml/15 min
Modes of operation	ml/min, ml/h, ml/24h, J/h, J/24h, volume overtime-automatic flow rate calculation Optional: ng, ml, ml±h, µg, mg, g, µU, U, U, kU, nmol, µmol, mmol, mol/kg/min, h, 24h intermittent infusion profile-up to 24 cycles soft and hard limits for all infusion parameters
Additional options	Automatic free flow protection Drug library up to 120 programmable drug dosing protocols (P1, P2 Models) Soft and hard limits for all infusion parameters (P2 Models) Programmable infusion pause: 1 min-24h Delayed start: 1 min-24h Programmed parameters and functions protected by password Drug library and configuration pump to pump transfer Alarm volume adjustment and choice of sound type Night mode: tuning the display's brightness and alarm loudness, programmable time of start/ end Simple connection/ disconnection to docking station (also during infusion) Advanced pump testing system Possibility to connect to the hospital information system directly or through docking station Open system: software update through RS232C
Alarms	No mains, battery low, battery empty, check IV set, check clamp, occlusion (upstream), occlusion (downstream), high pressure, line disconnected, flow too low, flow too high, mm:ss min to infusion end, infusion end, air line, air in line (accumulated), no drop detector, pause end, cycle end, drug not active, improper fixing, error XX, infusion broken, timer
Event log capacity	Min 2000 records with date and time of the event
Power supply	100 ~ 135V ~ 230V (±10%) VAC, 50/60 Hz, max 20 VA, 12 - 16 VDC, max 1 A
Battery	Ni-MH-2000 mAh, battery work time: 10 h/ 25 ml/h, recharging time to 100% max 5h
Communication ports	RS 232C and IR connection to the docking station
Alarm connection	24V, 1A, NO / NC
Dimensions	355 x 115 x 166 mm (W x H x D) - excluding pole clamp
Weight	2.5 kg-without power supply / connecting cords
Operating conditions	Temperature: +5°C ~ +40°C, max humidity 90%
Classification	Class I, type CF, defibrillation, IP22
Safety standards compliance	IEC 60601-1, IEC 60601-1-2, IEC 60601-2-24; MDD 93/42/EEC - II b
Docking stations	Medima DS4, DS4E, DS6, DS8, DS8E, DSA compatible

Volumetric infusion pump



mediflow

Safe infusion systems

Large and Easy-to-Read Graphic Display

Shows infusion rate, a drug name, power supply status, infusion pressure and other information. Data are readable from a considerable distance.

Intuitive User Interface

Identical for syringe and volumetric pumps, makes it easy to operate pumps even for beginners. Its numeric keyboard allows for fast and easy data input.

Easy Mounting of IV Sets

Our unique system for automatic infusion IV set mounting ensures easy and reliable operation of the pump, shortening preparatory procedure. The pump displays messages which guide through the infusion starting procedure, facilitating pump operation even more.

Variable IV Sets

Ensure high dosing accuracy, even for prolonged infusions (up to 96 hrs). All IV sets include a free flow protection clamp to protect the patient against uncontrollable infusion. The free flow protection clamp closes automatically before the IV set is removed from the pump.

Infusion Safety

Infusion safety is the paramount feature of Media Kavosh pumps which are provided with numerous state-of-the-art solutions for the purpose. Intelligent air sensor incorporated in the variable IV sets guarantees infusion safety and comfortable use of the pump by reducing the number of false alarms. Precise pressure sensors located up and down the pump allow to monitor progress of the infusion, alerting the medical personnel in case of any potential risk. The drop detector ensures extra safety of infusion.



All Indispensable Functions

Infusion rate modification without stopping the infusion, automatic and manual bolus, advanced infusion modes, comprehensive alarm system, occlusion bolus reduction, detailed event log, user password, mounting on vertical stands, comprehensive configuration options, data transfer to PC system.

Drug Library

The library standardises drug dosing procedures, considerably reducing the risk of errors. The pump memory can store up to 120 drug dosing protocols with all indispensable infusion parameters, units as well as soft and hard limits, in order to reduce the risk of overdose. Soft limits warn about exceeding the recommended values. Hard limits prevent from entering values from outside the pre-defined range. Using a drug library also reduces preparatory procedures for the infusion, and the medical personnel is not required to calculate doses into ml/h. However, ml/h infusions are simple and easy with drug libraries too.

Available Features:

- The basic and very simple model for continuous infusion in ml/h, ml/min, ml, 24h, l/h, l/24h.
- Calculation of infusion rate basing on volume and time. The option to save up to 120 drug names.



Compatible with MEDIMA Docking Stations

Available models accommodate 2, 4, 6, 8 syringe and/or volumetric pumps. Possibility to expand smaller docking stations with additional modules.

Type DS10x - basic model

Type DS20x - model displaying the status of mounted pumps with light signals

Type DS30x - model displaying the status of mounted pumps with light signals; a possibility to connect pumps to the MedimaNet system through monitoring LAN/WLAN network

Allow fast and easy pumps fixing with automatic connection to the mains and communication ports without using additional interconnecting cables.

