

MedimaNet

Infusion monitoring and archiving network system.

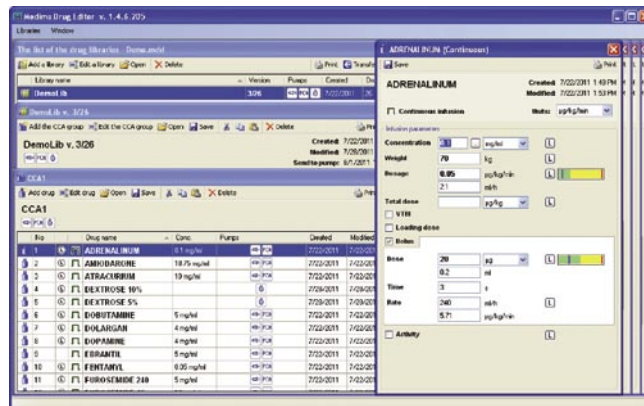


- Ward monitor
- Infusion progress monitoring
- Infusion progress archiving
- Reports
- Automatic transfer of drug libraries to pumps

Medima User ToolBox

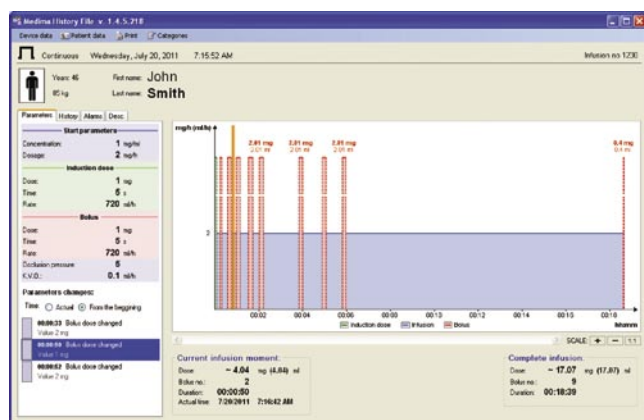
Software supporting infusion safety and precision.

Medima Drug Editor



Convenient and safe way of drug libraries creation in Windows environment. Enables fast transfer of drug libraries to pumps.

Medima History File



Software to archive and review infusions. Graphic presentation of infusion progress, detailed event log, history of infusion parameters modifications.

Medima Service ToolBox

Contains **Medima Loader** and **Medima Configurator**. Enables pumps upgrade as well as setting and uploading configurations to pumps adjusted to user's needs.

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Technical specifications

Flow rate	0.1 - 2000 ml/h for 50 ml syringe 0.1 - 1400 ml/h for 30 ml syringe 0.1 - 1000 ml/h for 20 ml syringe 0.1 - 600 ml/h for 10 ml syringe 0.1 - 400 ml/h for 5 ml syringe increments: 0.01 ml/h up to 99.99 ml/h, 0.1 ml/h from 100 ml/h to 999.9 ml/h, 1 ml/h above 1000 ml/h
Infusion volume	0.1 - 10000 ml, increments: 0.01 ml up to 999.99 ml, 1 ml above 1000 ml
Infusion time	1 min - 200 h
Bolus	Up to 2000 ml/h for 50 ml syringes Up to 400 ml/h for 5 ml syringes Increments: 0.01 ml/h up to 99.99 ml/h, 0.1 ml/h from 100 ml/h to 999.9 ml/h, 1 ml/h above 1000 ml/h Programmable volume (dose), time or flow rate. Automatic and manual bolus.
Induction dose	Up to 2000 ml/h for 50 ml syringes Up to 400 ml/h for 5 ml syringes Increments: 0.01 ml/h up to 99.99 ml/h, 0.1 ml/h from 100 ml/h to 999.9 ml/h, 1 ml/h above 1000 ml/h Programmable volume (dose), time or flow rate.
KOR (KVO)	0 - 5 ml/h, 0.1 ml/h increments
Flow rate accuracy	±2% in accordance with EN 60601-2-24*
Syringes types	5 - 50/60 ml of world known brands**, automatic volume recognition
Occlusion pressure	11 levels, 50 - 1000 mmHg, automatic reduction of occlusion bolus
Operation modes	Model S ml/min, ml/h, ml/24h, volume and time Model S1, S2, S-PCA ml/min, ml/h, ml/24h, volume and time ng, µg, mg, µU, mU, U, kU, nmol, µmol, mmol, mol/kg, --/min, h, 24h intermittent infusion profile - 24 cycles PCA mode
Additional functions	Automatic syringe fixation. Drug library with possibility to save up to 120 drugs dosing protocols (models S1, S2, S-PCA) with soft and hard limits for all infusion parameters (models S2, S-PCA) Drug library and configuration transfer from pump to pump Programmed parameters and chosen functions protected by password Alarm volume adjustment and choice of sound type Night mode: tuning the display's brightness and alarm loudness, programmable time of start/end Simple fixing to Medima docking station without removing the fixing clamp and without interruption of infusion Embedded power supply Possibility to connect to hospital system through the MedimaNet system Open system: software update through RS232C
Alarms	No mains, battery low, battery empty, 1 - 30 min. to infusion end, infusion end, 1 - 30 min. to syringe empty, syringe empty, syringe, high pressure, occlusion, line disconnected, improper fixing, drug not active, error xx, infusion broken, autoinfusion block the flow, battery disconnected, timer S-PCA : cover open, lock open, bolus button, bolus blocked dose limit
Event log capacity	Min. 2000 records of operational activities or alarms with date and time of the event
Power supply	100 (-15%) - 230 (+10%) VAC, 50/60 Hz, max 20 VA, 12 - 16 VDC, max 1 A
Battery	NiMH, working time: 20 h / 5 ml/h. Recharging time to 100% - max. 6 h
Interface	RS 232C and IR connection to the docking station
Nurse call connection	24V, 1 A, NO / NC
Dimensions	355 x 115 x 166 mm (W x H x D) - excluding pole clamp
Weight	Below 2.5 kg
Operating conditions	Temperature: +5 ÷ +40°C, humidity max. 90%
Transport conditions	Temperature: -20 ÷ +50°C, humidity max. 95%
Classification	Class I, type CF, defibrillation proof, IP22
Safety standards compliance	EN 60601-1, EN 60601-1-2, EN 60601-2-24, EN-1789, MDD 93/42/EEC - II b
Docking stations	Designed to accommodate 2, 4, 6 or 8 infusion pumps and a docking station designed for ambulances
Accessories ***	RS232C cord, DC power supply cord, Nurse call cord Infusion stand for Medima infusion pumps and Medima docking stations fixing Duo holder for fixing and carrying two Medima infusion pumps Software packets: Medima User ToolBox and Medima Service ToolBox, MedimaNet network software

* Technical accuracy is 0.5%. Flow rate accuracy depends on the syringe quality.

** List of syringes available on request. There is a possibility to calibrate other syringes according to customer needs.

*** Accessories are not standard equipment of pumps

In pursuit of quality improvement and due to changing standards the information in this leaflet may be subject to change. Contact Medima Sp. z o.o. to update the information.

Safe and precise infusion

Family of syringe infusion pumps



INNOVATIVE ECONOMY
NATIONAL COHESION STRATEGY



MINISTRY OF ECONOMY

EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND



Project co-financed by the European Union from European Regional Development Fund

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Safe infusion systems

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Large and Easy-to-Read Graphic Display

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

Wide Range of Syringes

Syringes of all world known brands from 5ml to 50/60ml.

Automatic Syringe Loading and Recognition

Facilitates and speeds up pump operation, reduces errors of initial infusion (very important in neonatology).

Simple Programming and Easy Operation

Quick data input from the numeric keyboard. Parameters can be changed without infusion interruption.

Infusion Programming in Different Units:

ml, ng, µg, mg, µU, mU, µmol, mmol, mol / kg / min, hour, 24h

Data Lock

Programmed parameters can be protected by password.

Advanced Infusion Modes

The following infusion modes are available: continuous, intermittent, profile (24 cycles), PCA.

Automatic Reduction of Occlusion Bolus

When occlusion is detected, the pump withdraws the syringe plunger decreasing the pressure in the extension line and reducing the excess of drug to a minimum.

Numerous 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's password, mounting on vertical and horizontal columns/rails, comprehensive configuration options, data transfer to PC or to the MedimaNet infusion monitoring system.

Drug Library

The library standardises drug dosing procedures, considerably reducing the risk of errors. The memory can store up to 120 drug dosing protocols with all indispensable infusion parameters, units as well as limits (soft and hard), 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 reduces also preparatory procedures for the infusion, and the medical personnel is not required to calculate doses into ml/h. However the drug library does not limit and does not hinder possibilities for simple infusion in ml/h.

Mounting in Docking Stations

Docking stations make it faster and easier to create infusion sets combined of a number of pumps, tailored to meet the requirements of a particular therapy. Medima docking stations are suitable for all Medima pumps, volumetric and syringe alike. Mounting pumps in docking stations is very easy and does not require dismantling any pumps elements - pumps are just slipped into the stations while the mains and communication ports connect to automatically. After their removal from docking stations, pumps are ready for conventional mounting. Moreover, docking stations allow to connect pumps to the hospital information system with the MedimaNet software.

Available models:

Medima S

- The basic and very simple model, infusion in ml/h, ml/min and ml/24h
- Calculation of infusion rate on volume and time
- The possibility to save up to 120 drug names and to display them during infusion

Medima S1

- Apart from the capabilities of the S model, allows for infusion in all popular, used in medicine, units (e.g. mg/kg/h, kU/h)
- Advanced infusion modes such as infusion with profile and intermittent infusion
- The possibility to save up a drug library containing maximum 120 drug dosing protocols but without limits on parameters

Medima S2

- Offers all capabilities of the S1 model. Additionally allows to save up a drug library with soft and hard limits for all infusion parameters

Medima S-PCA

- Designed to fight against postoperative or chronic pain Available with or without syringe cover



S-PCA Pump

(Patient Controlled Analgesia)

Designed to efficiently fight against acute pain.



Docking Stations

Designed to save valuable space around the patient's bed. Ensure fast and easy pumps mounting with automatic connection to the mains and communication ports (no additional cables needed). Optional LAN (Ethernet) connection allows for communication of pumps with the hospital information system (PDMS - Patient Data Management System). Available docking stations accommodate 2, 4, 6, 8 pumps.



Infusion Stands

Reliable and safe stands for infusion sets transport.



Duo Holder TP 2

Allows for easy connection and transport of two pumps together.