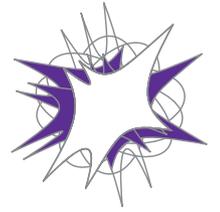virion\serion

Immunomat™
SERION ELISA Analyzer

Immunomat™

The **Immunomat™** is a 4-plate benchtop automat with integrated pipetting system, plate transporter, ELISA washer and reader. Four plate positions and incubators with agitation function to guarantee an efficient workload of the instrument allowing the processing of up to seven microtiter plates. Of course, the system is in compliance with the *in-vitro* diagnostic directive 98/79/EC.

Fully automated ELISA Analyzer

The **Immunomat™** attention to detail includes a barcode identification system for racks, reagents and microtiter plates and allows the processing of up to 16 different assays per plate. The easy access to buffers and reagents, level sensors for all fluid containers and a software-controlled tip management system guarantee customer convenient handling.

Liquid Handling

The **Immunomat™** is evaluated for antibody and antigen detection in serum, plasma and cerebro-spinal fluid (CSF), if necessary, as well as for avidity

determination with SERION ELISA *classic* and SERION ELISA *antigen* immunoassays.

Barcoded SERION ELISA Kit Components

Immunomat™ Software

The **Immunomat™** software allows the generation of assay protocols, panel definitions and worklists for routine diagnostics. Connection to laboratory software systems is possible via the bi-directional ASTM interface. Evaluation of SERION ELISA tests is carried out fast and conveniently by using the **Immunomat™** software.

Specifications of Immunomat™

Instrument

W x D x H	156 cm x 114 cm x 100 cm (when front window and drawer opened)
Weight	130 kg
Mains voltage	100 - 240 universal a.c. input
Temperature of environment	5 - 40 °C
Max. number of plates	Up to 7 microtiter plates
Barcode	Barcode identification of samples, reagents and microtiter plates
Barcode laser	Scanner for racksystem
Max. number of samples	Max. 240 samples or 180 samples, 10 reagents, 10 controls
Reagents	SERION racks
Dilution positions	Up to 4 dilution plates
Max. number of tip racks	Up to 5 tip racks with 300 μl or 1100 μl disposable tips

Pipetting System

Pipetting system	Liquid pipettor for disposable tips
Volumes min. / max.	For 300 μl tips 8 - 300 μl, for 1100 μl tips 301 - 1000 μl
Accuracy	$< 15\,\%$ CV for 25 μl volumes; $< 5\,\%$ CV for 100 μl volumes
Precision	$< 5\,\%$ CV for 25 μl volumes; $< 2.5\,\%$ CV for 100 μl volumes

Incubators

Incubation capacity	4 independent chambers with agitation function
Incubation range	Between RT $+$ 7 °C up to max. 50 °C with temperature control
Temperature	$+/-$ 2 °C (determined in the plate with 100 μl aqua dest.)

ELISA Washer

Capacity of buffers	Max. 4 positions
Dispense volume	200 - 999 μl / well
Residual volume	$< 2.5\,\mu$l in U-shaped bottom; $< 4\,\mu$l in flat bottom
Fluid alarms	Automated warning in case of lack of reagents or filled waste container

Photometer

Spectral range	400 - 700 nm
Dynamic range	0.00 OD up to 3.50 OD
Accuracy	$+/-$ 0.005 OD or 2.5 %
Reading time / 96 wells	< 15 sec.
Number of filters	Up to 8 filter positions (Standard 405, 620 nm)

Highlights of Immunomat™

- **SERION ELISA Analyzer** for medium to high throughput applications
- Validated for **antibody detection** in serum, plasma or cerebrospinal fluid (CSF), for **avidity determination** and **antigen detection** with **SERION ELISA immunoassays**
- **Short loading times** by **barcode identification** of samples, reagents and microtiter plates
- Processing of **up to 16 different assays per plate**
- **Reload function** for patient samples, reagents and microtiter plates
- **2D hand barcode scanner** for **parameters of quality control certificates**
- **Multishot dispenser function** and **memory function for tip racks**
- **Optimize function** for scheduling for an **efficient workload** of the instrument
- **Clot detection** and **bubble kill function** guarentee **walk-away functionality**
- **Level sensors for fluid containers** with **automated warning** in case of **lack of reagents or filled waste container**
- **Easy access to buffers and reagents**
- Fast and **quantitative evaluation** of SERION ELISA immunoassays
- **Parameter- or patient-orientated result reports**
- **Listing of test reagents**
- **Import/export function for reagents**
- Integrated **reports for quality controls** of standards and controls
- **Bi-directional connection to laboratory software systems** via ASTM interface

Order Information of Immunomat™ and Lab Ware

Immunomat™		Order Nr.:	VT 020
SERION Clean, cleaning solution, 500 ml, 5 x conc.		Order Nr.:	VT 125
Deep well microtiter plates, 50 pieces		Order Nr.:	VT 124
Pipetting tips, 300 μl, 18 x 960 tips		Order Nr.:	VT 111
Pipetting tips, 1100 μl, 10 x 960 tips		Order Nr.:	VT 112
Plastic bottles, white, with cap, 35 ml, 100 pieces		Order Nr.:	VT 113
Plastic bottles, yellow, with cap, 35 ml, 100 pieces		Order Nr.:	VT 114
Plastic bottles, white, with cap, 50 ml, 100 pieces		Order Nr.:	VT 115
Glas bottles, with cap, 2.5 ml, 323 pieces		Order Nr.:	VT 116
Glas bottles, with cap, 2.5 ml, 30 pieces		Order Nr.:	VT 116-30
Waste bags, 10 pieces		Order Nr.:	VT 051