# Technical Specifications

#### Instrument

**W x D x H** (with open front window and drawer): 114 cm x 156 cm x 100 cm

Weight: 130 kg

Mains voltage: 100–240 V universal a.c. input Ambient operating temperature: 15–25 °C

**Max. number of plates:** Up to 7 microtiter plates at RT

**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 10–300 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 µl in U-shaped bottom; < 4 µl in flat bottom

**Precision:** 5 % CV for 300 µl volumes

Fluid alarms: Automated warning in case of lack of reagents or filled waste container

#### **Photometer**

Spectral range: 400-700 nm

Dynamic range: 0.0 OD up to 3.0 OD Linearity: +/- 0-2.000 OD or 1% Accuracy: +/- 0.005 OD or 2.5% Reading time / 96 wells: <15 sec.

Number of filters: Up to 8 filter positions (Standard 405, 450, 620 nm)

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## **SERION Immunomat**

The SERION 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 guarantee an efficient workload of the instrument allowing the processing of four microtiter plates. Of course, the system is in compliance with the *in vitro* regulation 2017/746.

### **Fully automated ELISA Analyzer**

SERION Immunomat 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. SERION Immunomat is validated for different applications using SERION ELISA *classic* and SERION ELISA *agile* immunoassays.

#### **SERION Immunomat Software**

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

# Highlights

- SERION ELISA Analyzer for medium to high throughput applications
- Validated for antibody detection in serum, plasma or cerebrospinal fluid (CSF) and for avidity determination with SERION ELISA classic and SERION ELISA agile immunoassays according to the intended use of the tests
- · 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
- · Tip type detection and memory function for tip racks
- · Optimize function for scheduling for an efficient workload of the instrument
- Clot detection, bubble kill function and reagent level check guarantee secure processing of samples
- 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 classic and SERION ELISA agile 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
- · Bidirectional connection to laboratory software systems via ASTM interface

Order information	Order No.
SERION Immunomat	VT020
SERION Clean, cleaning solution, 500 ml, 5 x conc.	VT125
Deep well microtiter plates, 50 pieces	VT124
Pipetting tips, 300 μl, 18 x 960 tips	VT111
Pipetting tips, 1100 μl, 10 x 960 tips	VT112
Plastic bottles, white, with cap, 35 ml, 100 pieces	VT113
Plastic bottles, yellow, with cap, 35 ml, 100 pieces	VT114
Plastic bottles, white, with cap, 50 ml, 100 pieces	VT115
Glas bottles, with cap, 2.5 ml, 323 pieces	VT116
Glas bottles, with cap, 2.5 ml, 30 pieces	VT116-30
Waste bags, 10 pieces	VT069-002