

Technical Specifications



Performance Data

Principle	Fluorescent cell labelling and automated flow cytometry Detection and counting of viable micro-organisms on a cell to cell basis after labelling of targeted micro-organisms with a specific fluorescent dye
Sensitivity of detection	Down to 50 micro-organisms per ml – Depending on sample volume analysed
Linearity	Up to 10^5 viable micro-organisms per ml (no dilution needed below 10^5 cells/ml)
Sample Capacity	Up to 25 samples per batch (including controls)
Sample Throughput	Up to 25 samples per hour, depending on applications
Calibration	Ready to use calibration solution – Fluorescent beads
Internal Standard	Integrated standard solution for individual sample result validation



Instrument

Flow Cytometer (Analyser)

Laser Unit	Optically pumped semiconductor laser 488 nm excitation wavelength
Flow cell	Quartz flow cell – Channel section 300x200
Detectors	Detection wavelength 500-530 nm for labelled cells Detection wavelength 540-α nm for particle discrimination
Fluidic	2 syringe pumps for cleaning and sheath solution
Sample Volume analysed	Programmable from 50 µl to 400 µl
Sample Flow rate	Programmable from 10 µl/min to 500 µl/min
Counting time	Application dependent – From less than 30 sec. to 2 min.
Flow system cleaning	Automatic cleaning between samples with cleaning solution Volume programmable
Dimensions (W x D x H)	71 x 17 x 45 cm

Sample Preparation Unit

Template	1arm - 2 syringes pumps - 2 membrane pumps Temperature controlled incubation rack and cooling rack
Incubation Temperature	30°C and 40°C
Dimensions (W x D x H)	55 x 66 x 66 cm

Computer / Peripherals

Minimum Configuration	Pentium IV or higher, 2 GB RAM / 320 GB hard disk or higher
Peripherals	CD-ROM writer, flat monitor, Printer, Specific board for data capture and treatment
Operating system	Windows 7 pro

Data Handling

Application setting	Preloaded analytical applications
Sample identification	Dedicated table to enter sample information
Results data	Quantitative data and qualitative data with 3 colour codes in function of the contamination levels
Data traceability	21 CFR Part 11 compliance Storage on Hard disk for full traceability
Data output	Network capability, USB, CD/DVD writer

Installation Requirements

Electrical	100 - 240 Volts 50/60 Hz - Operates on single-phase grounded power line – On line UPS recommended
Footprint system	180 cm x 70 cm
Ambient temperature	18 – 30°C
Ambient humidity	5 to 80 %

