

Technical Specifications

(Food template)



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 50 samples per batch (Including controls)
Sample Throughput	Up to 50 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 300 x 200	
Detectors	Detection wavelength 500-530 nm for labelled cells	
	Detection wavelength 540- α nm for particle discrimination	
Fluidic	3 syringe pumps for sample injection and cleaning/sheath solution	
Sample Volume analysed	Programmable from 50 μl to 600 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 63 x 46* cm *104 cm when cover is open	
Sample Preparation Unit		
Template	2 arms - 3 syringe pumps – 2 membrane pumps Temperature controlled incubation rack and cooling rack	
Incubation Temperature	30°C and 40°C	
Dimensions (W x D x H)	199 x 66 x 77 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	250 cm x 70 cm	
Ambient temperature	18 – 30°C	
Ambient humidity	5 to 80 %	