Product fact sheet

CyFlow™ Cube 6 V2m

Version 1.0

Manufacturer information

Sysmex Partec GmbH
www.sysmex-europe.com

Summary

The CyFlow™ Cube 6 V2m is a flow-based analyser that is specifically pre-configured for routine microbiological applications. Together with a portfolio of dedicated reagent kits and pre-defined protocols, it serves as a plug-and-play solution for the rapid and accurate enumeration of microorganisms in industrial samples.

It offers a standardized and integrated approach to routine analyses, incorporating instrument QC, application-specific configuration scripts, and report templates with conditional alerts. All these features allow users to be quickly operational and deliver objective results regardless of the user's level of experience.

The CyFlow Cube 6 V2m is best suited to quality control labs with moderate to large workloads and can be configured for each customer in accordance to their individual requirements.

Productivity

- Replaces labour-intensive, time-consuming tasks with a more efficient and resource-saving process
  - Saves up to 99% valuable processing time* compared to plating, without the need of being an expert
  - Saves up to 55% of the costs* compared to plating, without the need of being an expert
- Microbial counts are obtained within minutes to hours, depending on the exact test kit used, and are stable and unaffected by room temperature

- Operating the analyser is easy and requires neither microbiology expertise nor flow cytometry experience
- One instrument platform can be used for multiple Sysmex test kits and applications
- An optional autoloader for the CyFlow Cube 6 V2m allows automated sample processing
- Instrument maintenance is very simple and easy to execute, compared to other rapid microbiology test methods

Key features in industrial testing

- Automated report generation for quality control and analyses
- Multilingual guided procedure and reports
- User management and data logging
- Custom programmable notifications and conditional alerts for quality control and analysis
- Support for method validation

Ordering information

Item name	Description	Item code
CyFlow™ Cube 6 V2m	Flow cytometer for microbiology applications	CY-S-3061R-V2m
CyFlow™ Robby 6 V2m Autoloading Station	96-well plate autoloader (optional accessory)	CY-S-3083-V2m

Main reagent kits for microbiological tests

Item name	Description	Item code
CyStain™ BacCount Total	Total microbial count kit	05-5008
CyStain™ BacCount Viable	Viable microbial count kit	05-5028
YeastControl Viability	Yeast viability count kit	05-6000-02
CyFlow™ BrettCount	Brettanomyces bruxellensis count kit	05-6002
Flow VIT® Alicyclobacillus	Alicyclobacillus count kit	01150001

This list is not exhaustive. Please contact your Sysmex representative for further information.

Performance specifications

Feature	Description
Microbial enumeration**	• Absolute total bacterial count • Absolute viable bacterial count • Ratio of live-dead bacterial cells • Ratio of live-dead yeast cells
Counting methods	• Absolute counting by electrodes (TVAC) (in manual mode) • Syringe controlled volumetric counting (VCC) (in both manual and automated modes)
Sample points • Sample flow rate • Minimum detectable particle size • Maximum particle size in sample • Validated range**	• Adjustable from 0.1 to 19.9 µl /s • 0.1 µm • 100 µm • 1.0×10^3 - 2.0×10^5 cells /ml
Technologies	• Fluorescence flow cytometry • Hydrodynamic focusing • 60mW 488nm blue laser • 5 optical parameters • Standard objective mount with high numerical aperture
Data acquisition • Acquisition rate • Maximum events per sample	• Maximum 15,000 particles /s • > 4 million events
QC functions	• Control of instrument functions
Software	• CyView™ software for data acquisition and data analysis • User management • Guided prime, quality control and shut down procedures • FCS Express™ software for data analysis and reporting • Multilingual guidance for procedures and reports • Custom-programmable notifications and conditional alerts (e.g., pass-fail, valid-invalid, re-run) • Microsoft Windows™ 10 operating system

Technical specifications

Feature	Description
Interface	• USB, LAN, video output
Operative temperature	• 15 to 30 °C

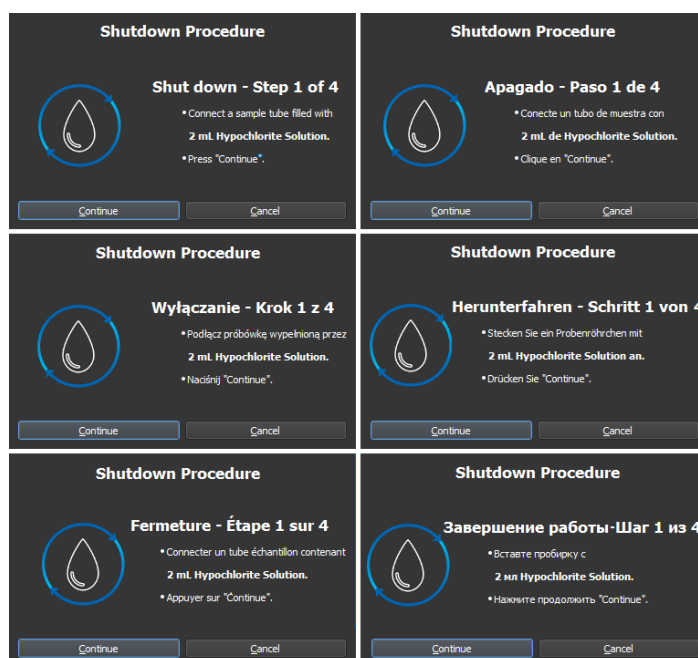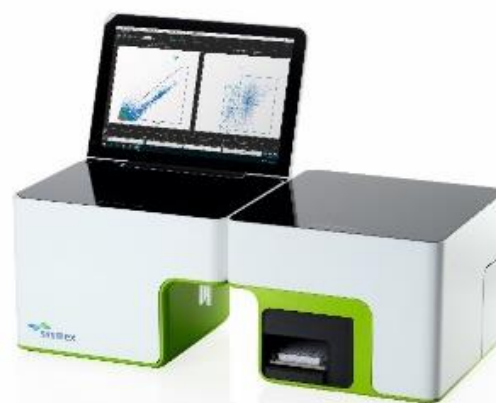|	
Operative humidity	• 20 to 85 %
Power requirement	• AC 100 ± 10% V (50 / 60 Hz) or • AC 240 ± 10% V (50 / 60 Hz)
Power consumption	• Approx. 120 VA
Acoustic noise level	• 80 dBA or less
Dimension • close display • open display	 • 385 x 280 x 290 mm (W x D x H) • 385 x 280 x 528 mm (W x D x H)
Weight	• Approx. 18 kg

Examples of adjustable guided procedures in different languages.

CyFlow Cube 6 V2m with Robby V2m autoloading station

For detailed ordering information please ask your Sysmex
representative.

* Calculations were made under the following assumptions:

Time: 13 minutes incubation time to result (using CyStain BacCount)
versus 2,894 minutes for plate counts

Reagent costs: 1€ versus 0.30 €/sample (Warren et al. 2016), labor costs
2.92 €/sample instead of 8.75€ (estimated with 35€ /hour labour costs)

**depending on the reagent kit used and the methodology

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