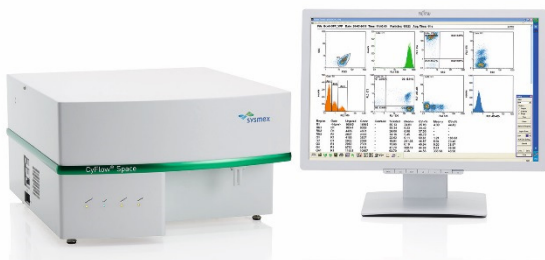


Product Fact Sheet

CyFlow® Space

Product Picture



Product name

CyFlow® Space

Manufacturer information

The CyFlow® Space is manufactured by Sysmex Partec GmbH.

Sysmex Partec GmbH
Am Flugplatz 13
02828 Görlitz
Germany
www.sysmex-partec.com

Sysmex Partec is an ISO 9001:2008 and ISO 13485:2012 certified company.

Summary

The CyFlow® Space is a high performance multi-laser flow cytometer system which offers the most flexible, simple and reliable features for routine and research work. It's a compact multi-colour instrument for analysis of individual cells and microscopic particles in suspension. The advanced flow cytometry technology of the CyFlow® Space covers a wide range of different applications.

Productivity values

Fluorescence excitation by 1 to 5 light sources covering a range from ultra-violet to red excitation lines.
Analysis of up to 13 fluorescence parameters and 3 physical light scattering parameters from near UV to infra-red light.
Analysis of cell and particle concentration by True Absolute Volumetric Counting.
Cell sorting by an optional cell and particle sorter.
Fixed standard configurations and flexible customized configurations tailored for the users requirement.
Walk-away automation by sample auto-loading from 96- and 384-well plates.

Main features of CyFlow® Space

- ✓ Maximum acquisition rate up to 25,000 signals / s
- ✓ Scatter particle size: 0.1 – 100 µm
- ✓ Fluorescence sensitivity: < 100 MESF (FITC), < 50 MESF (PE)
- ✓ Fluorescence resolution: CV < 2%
- ✓ Signal height, signal width and signal length (doublet discrimination)
- ✓ Optional CyFlow® Space Autoloading Station for high speed auto sampling
- ✓ True Volumetric Absolute Counting (TVAC)
- ✓ Windows™ FloMax® software for real-time data acquisition, data display and data evaluation
- ✓ User friendly software compensation online and offline
- ✓ Start-up time < 5 min
- ✓ Easy-to-use acquisition software
- ✓ Parallel 16 bit digital pulse processing (65536 channels)

Specifications

Feature	Description
Parameters	Up to 16 optical parameters (Analyser) and 8 optical parameters (Cell Sorter)
Light Sources	As Analyser: up to 5 light sources - Blue laser: 50 mW fix or 200 mW adjustable 488 nm - Red diode laser: 638 nm 25 mW or 640 nm 40 mW - Violet diode laser: 100 mW 405 nm - Green DPSS laser 30 or 100 mW 532 nm - Yellow laser: 100 mW 561 nm - High power UV LED: 365 nm - Ultra-violet diode laser: 60 mW 375 nm - Orange diode laser: 50 mW 594 nm As Cell Sorter: up to 3 light sources - Blue laser: 50 mW fix or 200 mW adjustable 488 nm - Red diode laser: 638 nm 25 mW or 640 nm 40 mW - Violet diode laser: 100 mW 405 nm - Green DPSS laser: 30 or 100 mW 532 nm - Orange diode laser 50 mW 594 nm - Yellow laser: 100 mW 561 nm - High power UV LED: 365 nm - Ultra-violet diode laser 60 mW 375 nm

	Minor variations from nominal emission wavelength of violet and red laser diodes may occur due to normal production tolerances
Optics	- Modular optical system with up to 16/8 optical parameters with selected PMTs with integrated electronic preamplifier for FSC, SSC, FL1-FL13 - Exchangeable optical filters - Colour CCD camera for sample flow monitoring - High numerical aperture objectives - Immersion gel coupling (option) - Separated intermediate image planes for optimized spatial filtering by diaphragms - Light polarization module (upon request)
Flow System	- Quartz glass flow cuvette for laminar sample transport and hydrodynamic focusing - Completely closed fluid system - Sample port with biosafety cleaning system - True Volumetric Absolute Counting based on mechanical volume measurement - Computer controlled precision syringe pump speed continuously adjustable from 0–20 µl/s - Easily accessible sheath fluid and waste reservoirs with fluid level sensors
Electronics	- Parallel signal processing for each optical channel - Selectable linear, 3- or 4-decade Logarithmic scale - Pulse height, area, and width analysis for doublet discrimination 16 bit analogue-to-digital converters, trigger selectable on any parameter or on all parameter combination - Individual threshold level settings

Computer / Display	- Windows™ PC 22" TFT LCD display - Dual screen setup (optional) - DVD-RW - Keyboard, mouse, barcode reader (optional) - USB ports - Graphic, sound and network on-board 100 Mb/s and 1000 Mb/s Ethernet connection - DeskJet colour printer, black & white or colour laser printer (optional), printing via network
Software	- Microsoft Windows™ operating system with full network support 32 bit Windows™ FloMax® software for routine and research applications 64 parameter real-time data acquisition and analysis 3-spot acquisition from spatially separated light sources with time-window delay 1-parameter histograms and dot plots 64 - 32768 channels resolution for 1p histograms 32/32 - 1024/1024 channels for dot plots - Multi-parameter n-colours crosstalk compensation - Multi parameter colour gating - Signal ratio measurement and calculated parameters - Peak and cluster analysis and statistics - DNA cell cycle analysis - DNA peak analysis - Multi tube panel system with automated acquisition - Flow cytometry standard data format (FCS) for storage of original and evaluated data - Storage of instrument settings, screen layout templates, panels, gates and compensation matrices - Automated reporting of statistics, graphics and instrument settings to Word or Excel - Export of list mode data 3 off-line FloMax® data analysis licences for the use on external PC
Sampler unit capacity (optional)	96-well plates, 384-well plates; Throughput down to 15 minutes / 96-well plate
Dimension	L 560 mm x W 650 mm x H 300 mm

Weight	• Approx. 37 kg
Interface	• PCIe
Operative temperature	• 15 – 30° C
Operative humidity	• 20 – 85 % rel. (non-condensing)
Noise	• < 70 dBA
Electrical Specification	• 2/II
Nominal voltage	• 100 – 240 VAC
Power consumption	• 350 VA
Optional configurations	Description
Standalone	
with Autoloading Station	Autoloading Station for 96 and 384 well plates
With Sorter Unit	Piezo-electric Cell- and Particle Sorting device
With Anaerobic Cabinet	(Upon request)

Article number

Article no.	Item	Description
CY-S-3001R_VA01	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P
CY-S-3001R_VS01	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P Sorter Upgradable
CY-S-3001R_VA02	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P 638nm-25mW-1P
CY-S-3001R_VS02	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P 638nm-25mW-1P Sorter Upgradable

CY-S-3001R_VA03	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-200mW-6P 638nm-25mW-2P
CY-S-3001R_VS03	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-200mW-6P 638nm-25mW-2P Sorter Upgradable
CY-S-3001R_VA04	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-1P 405nm-100mW-1P
CY-S-3001R_VS04	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-1P 405nm-100mW-1P Sorter Upgradable
CY-S-3001R_VA05	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-2P 405nm-100mW-2P
CY-S-3001R_VS05	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-1P 375nm-60mW-1P Sorter Upgradable
CY-S-3001R_VA06	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-1P 375nm-60mW-1P
CY-S-3001R_VS06	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-1P UVLED-1P Sorter Upgradable

CY-S-3001R_VA07	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-7P 638nm-25mW-2P 375nm-60mW-1P
CY-S-3001R_VS07	CyFlow® Space Set	Consisting of: CyFlow® Space UVLED-1P Sorter Upgradable
CY-S-3001R_VA08	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-1P UVLED-1P
CY-S-3001R_VS08	CyFlow® Space Set	Consisting of: CyFlow® Space 532nm-30mW-2P Sorter Upgradable
CY-S-3001R_VA09	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-8P 638nm-25mW-4P 405nm-100mW-2P 375nm-60mW-1P
CY-S-3001R_VS09	CyFlow® Space Set	Consisting of: CyFlow® Space 532nm-30mW-1P UVLED-1P Sorter Upgradable
CY-S-3001R_VA10	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-200mW-8P 640nm-40mW-4P 405nm-100mW-2P 375nm-60mW-1P
CY-S-3001R_VS10	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-2P Sorter Upgradable

CY-S-3001R_VA11	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-2P
CY-S-3001R_VS11	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P Sorter Upgradable
CY-S-3001R_VA12	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P
CY-S-3001R_VS12	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P UVLED-1P Sorter Upgradable
CY-S-3001R_VA13	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-3P
CY-S-3001R_VS13	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P 532nm-30mW-1P Sorter Upgradable
CY-S-3001R_VA14	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P UVLED-1P
CY-S-3001R_VS14	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P 561nm-100mW-1P Sorter Upgradable
CY-S-3001R_VA15	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P 532nm-30mW-1P

CY-S-3001R_VA16	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-5P 561nm-100mW-1P
CY-S-3001R_VA17	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 375nm-60mW-1P
CY-S-3001R_VA18	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-7P 638nm-25mW-3P 405nm-100mW-2P
CY-S-3001R_VA19	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-7P 638nm-25mW-3P 405nm-100mW-3P
CY-S-3001R_VA20	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-2P 405nm-100mW 375nm-60mW-2P
CY-S-3001R_VA21	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 638nm-25mW-2P 375nm-60mW-1P
CY-S-3001R_VA22	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-7P 638nm-25mW-3P 375nm-60mW-1P
CY-S-3001R_VA23	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 405nm-100mW-2P 561nm-100mW-2P
CY-S-3001R_VA24	CyFlow® Space Set	Consisting of: CyFlow® Space 488nm-50mW-6P 405nm-100mW-2P 532nm-30mW-2P
16-02-3000	CyFlow® Space	Autoloading Station for 96 and 384 well plates

	Autoloading Station	
12-01-1000	CyFlow® Sorter for CyFlow® Space	Sorter module

This product is intended 'For Research Use Only' (RUO).