

Technical data sheet

# Sepiatec SFC MultiSample System

The Sepiatec MultiSample SFC chromatography systems are extremely compact, ensure safety on the highest level and are easy to use for any preparative separations. They are primarily used by customers aiming to automatically process one or more samples taking advantage of the build-in autosampler. The fraction collector XYZ allows for the collection of a large number of fractions, making these SFC systems the preferred choice for achiral and natural products applications.



## Scope of delivery

All configurations are supplied ready to use.



### NOTE

The scope of delivery depends on the configuration of the purchase order.

Accessories are delivered as per the purchase order, order confirmation, and delivery note.

## Order code



### NOTE

The order code is the configuration of the purchase order.

The configuration of the purchase order cannot be changed after the delivery. Finalize the configuration according to your needs before the order.



Flow rate (at 40% modifier)

050 50 mL/min

250 250 mL/min

Voltage

0 100 - 120 V

1 220 - 240 V

## Technical data

### Sepiatec SFC MultiSample systems

Specification	Sepiatec SFC-50 MultiSample	Sepiatec SFC-250 MultiSample
Dimensions (W × D × H), mm	1170 × 660 × 880	1170 × 660 × 880
Weight	148 kg	148 kg
Connection voltage	Europe: 230 ± 10% VAC Asia: 230 ± 10% VAC USA: 115 ± 10% VAC	Europe: 230 ± 10% VAC Asia: 230 ± 10% VAC USA: 115 ± 10% VAC
Power consumption	Europe/Asia: 1800 W USA: 1150 W	Europe/Asia: 2300 W USA: 1150 W
Overvoltage category	II	II
Frequency	50 / 60 Hz	50 / 60 Hz
IP Code	IP 20	IP 20
Pollution degree	2	2
Minimum clearance on all sides	100 mm	100 mm
Electronic connections	3 USB ports, Ethernet, HDMI	3 USB ports, Ethernet, HDMI
Certificate	CE / UKCA	CE / UKCA

### System controller

Specification	Sepiatec SFC-50 MultiSample	Sepiatec SFC-250 MultiSample
Controller	15.6" touchscreen, 16:9 format	15.6" touchscreen, 16:9 format
System	Integrated Windows 10	Integrated Windows 10
Control software	Prep SFC MultiSample software	Prep SFC MultiSample software

## Method and operation

Specification	Sepiatec SFC-50 MultiSample	Sepiatec SFC-250 MultiSample
Operating temperature range	15 – 25 °C	15 – 25 °C
Operating pressure	Max. 400 bar	Max. 400 bar
Backpressure regulator	Electromagnetic control valve, adjustable, up to 300 bar	Electromagnetic control valve, adjustable, up to 300 bar
Preparative SFC	Yes	Yes
Column dimensions	ID: 4 – 16 mm Length: max. 250 mm	ID: 15 – 30 mm Length: max. 250 mm
Column oven temperature	Ambient to 70 °C	Ambient to 70 °C
Max.column capacity	10 of ID 4 to 16 mm	10 of ID 4 to 16 mm or 6 of ID >16 mm

## Autosampler

Specification	Sepiatec SFC-50 MultiSample	Sepiatec SFC-250 MultiSample
Autosampler syringe	1.0 or 2.5 mL	1.0 or 2.5 mL
Loop	0.5 or 2.0 mL	0.5 or 2.0 mL
Stack injection	Standard	Standard
Injection mode	Modifier stream Mixed stream (capillary delivered)	Modifier stream Mixed stream (capillary delivered)
Number of sample vials	60 x 1.5 ml autosampler vials	60 x 1.5 ml autosampler vials
Injection precision	< 0.5 % variable volume injection	< 0.5 % variable volume injection
Linearity	Correlation factor > 0.999	Correlation factor > 0.999

## Fraction collection

Specification	Sepiatec SFC-50 MultiSample	Sepiatec SFC-250 MultiSample
Pressure-less collection	Standard	Standard
Fraction collector XYZ	Up to 195 fractions, safety cover, 3 racks capacity, open bed fraction collector, one GLS continuously working	Up to 195 fractions, safety cover, 3 racks capacity, open bed fraction collector, one GLS continuously working
Racks	5 different sizes, mixable	5 different sizes, mixable

## Solvents

Specification	Sepiatec SFC-50 MultiSample	Sepiatec SFC-250 MultiSample
CO <sub>2</sub>	Liquid	Liquid
Required CO <sub>2</sub> purity	Food grade (99.9%)	Food grade (99.9%)
Number of organic modifier	4	4
CO <sub>2</sub> Recycling module available	No	No

## Detectors

Specification	Sepiatec SFC-50 MultiSample	Sepiatec SFC-250 MultiSample
DAD wavelengths range	190 – 720 nm	190 – 720 nm
DAD wavelengths selectable	4	4
ELSD (optional)	Yes	Yes
MS (optional)	Yes	Yes

## Pumps

Specification	Sepiatec SFC-50 MultiSample	Sepiatec SFC-250 MultiSample
Total flow rate at 40 % modifier	50 mL/min	250 mL/min
CO <sub>2</sub> pump flow rate	Max. 30 mL/min	Max. 150 mL/min
CO <sub>2</sub> pump pressure	400 bar	400 bar
Number of modifier pumps	1	1
Modifier pump flow rate	Max. 30 mL/min	Max. 150 mL/min
Modifier pump pressure	400 bar	400 bar
Add-on pump	Max. 30 mL/min	Max. 30 mL/min
Chiller	Optional external (F-305)	Optional external (F-305)

## Ambient conditions

For indoor use only.

Specification	Value
Max. altitude above sea level	2,000 m
Ambient and storage temperature	15 – 25 °C
Maximum relative humidity	45 – 75%, not condensing

## Spare parts and accessories

Use only genuine BUCHI consumables and spare parts in order to ensure correct, safe and reliable operation of the system.



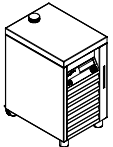
### NOTE

Any modifications of spare parts or assemblies are only allowed with the prior written permission of BUCHI.

## Spare parts

	Order no.	Image
Check valve CO2 pump inlet	11075916	
Check valve CO2 pump outlet	11075917	
Usit-ring G 1/8"	11075918	
Tubing SS, 1/16" OD x 1.0 mm ID, 1 m long	11076182	
Fitting set, 1/16" (10pcs) SS 303	11076183	
Ferrule set, 1/16" (10pcs) SS 316	11076184	
Flow cell for SFC, 3 mm, 1/16"	11076188	

## Accessories

	Order no.	Image
MS connection module for all Sepiatec SFC Including make-up pump and splitter	11075598	
Advion expression S compact mass spectrometer for all Sepiatec SFC m/z 1200, APCI ion source	11075599	
Advion expression L compact mass spectrometer for all Sepiatec SFC m/z 2000, APCI ion source	11075600	
ELSD external, for all Sepiatec SFC Low temperature light scattering detector, blue LED 405 nm	11075621	
Recirculating Chiller F-305 550 W at 15°C, Display, 230 V	11F30501	
Recirculating Chiller F-305 550 W at 15°C, Display, 110 V	11F30502	
Rack No. 1 65 vials, 10 mL each (max. 3 racks in the fraction collector)	11075615	
Rack No. 2 24 vials, 60 mL each (max. 3 racks in the fraction collector)	11075616	

	Order no.	Image
Rack No. 3 24 vials Falcon tubes, 50 mL each	11075617	
Rack No. 4 4 flasks, 100 mL each, max. height: 139 mm, max. 12 flasks when using 3 racks	11076510	
Rack No. 5 3 flasks, 250 mL each, max. height: 139 mm, max. 9 flasks when using 3 racks	11076511	

## Maintenance kits

	Order no.	Image
Maintenance kit SFC-50 MultiSample	11078910	
Maintenance kit SFC-250 MultiSample	11078911	



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