# ITEM OPPORTUNITY SYNOPSIS

**Name of the item to be scouted:** Organic Solvent Evaporator System and Accessories similar to SyncorePlus

State item to be used in: North Carolina

#### Describe the Item:

Please describe the item application/the end use of item. This system is used for large volume (300-1000 mL) evaporation of organic solvents from sample extracts. The instrument must evaporate the solvent from up to 12 samples simultaneously which is a requirement due to the large number of samples to be processed.

#### Supplier Information:

Type of Supplier being sought (select from list below)

**Manufacturer** 

**Contract Manufacturer** 

**Distributor** 

Other (please specify)

Reason for scouting submission (select from list below)

2<sup>nd</sup> Supplier

Price

**Re-Shore** 

Past supplier no longer available

**New Product Startup** 

**BABA** 

Other (please specify) Buy American

#### **Summary of Technical Specifications and Performance Requirements:**

Describe the manufacturing processes (elaborate to provide as much detail as possible). see attached comparable technical specifications and brochure.

**Provide dimensions / size / tolerances / performance specifications of the item.** see attached comparable technical specifications and brochure.

List required materials needed to make the product, including materials of product components, if applicable. see attached comparable technical specifications and brochure.

Are there applicable certification requirements?

Yes

No

**Please Explain:** The unit must be able to evaporate large volumes (300-1000 mL) of organic solvents from sample extracts. The instrument must evaporate the solvent from up to 12 samples simultaneously. All certifications for laboratory equipment to be utilized in the United States are applicable. https://www.epa.gov/quality/equipment-certifications-laboratory-services-and-applied-science-division

Are there any applicable regulations that apply to the production of this item?

Yes

No

**Please Explain:** All certifications for laboratory equipment to be utilized in the United States are applicable. https://www.epa.gov/quality/equipment-certifications-laboratory-services-and-applied-science-division

Are there any other standards, requirements?

Yes

No

**Please Explain:** All certifications for laboratory equipment to be utilized in the United States are applicable. https://www.epa.gov/quality/equipment-certifications-laboratory-services-and-applied-science-division

#### **Additional Comments:**

**Additional technical comments:** All components used for solvent extraction made from selected low-extractable materials and certified as usable for PFAS (Per- and polyfluoroalkyl substances) samples

#### Volume and Pricing:

Estimated Potential Business Volume (i.e. #Units per day, month, year): 1-time purchase for 1 each solvent evaporator.

**Estimated Target Price / Unit Cost Information:** \$49,126 for system, consumables, and installation.

#### **Delivery Requirements:**

When is it needed by? (Immediate, 30 days, 6 months, etc) Immediate

Describe packaging requirements (i.e., individually/ group packaging). As required by the manufacturer.

Where will this item be shipped? US EPA 109 T.W. Alexander Drive Research Triangle Park, NC 27709

#### **Additional Comments:**

**Is there other information you would like to include?** 1. Vendor/company must be registered or will to register in SAM.gov (https://sam.gov/content/home). 2. This inquiry does not guarantee award of a contract. 3. This acquisition is not intended to include funding for investments needed to retool production facilities. 4. The EPA's need are for an item immediately available in the commercial marketplace due to mission requirements.





**Parallel Evaporation Solutions** Automate your workflow



# **Parallel Evaporation Solutions**

#### From market creator to market leader

BUCHI was the first company to commercialize the rotary evaporator in 1957. For over 60 years, we have continued to innovate and deliver market-leading solutions for the evaporation of solvents. We have built a vast user base in this time and developed a strong reputation for reliable instruments, state-of-the-art solutions, and personalized application support. With our automated parallel evaporation instruments, BUCHI continues to improve with the most efficient, sustainable, and safe solutions for parallel solvent evaporation.







# Automated solutions

Boost efficiency

We offer advanced automation features for increased productivity and cost-effectiveness. Increase throughput and maximize efficiency with our innovative instruments that allow processing of up to 96 samples in parallel.

#### **Green solutions**

Sustainable and fast

Our parallel evaporation solutions increase analyte and solvent recovery efficiently and sustainably, saving both time and money. Solvent recycling is optimized with zero nitrogen consumption, which protects the environment and enhances sustainability.

#### Safe solutions

Highest analytical standards

Improved safety features such as sealing, an automated process, and cooled appendix will protect you and your analytes. These features help optimize analyte recoveries and safeguard your analyte from heat damage.

# Applications to fit your needs

# Meeting the demands of your industry

Our latest parallel evaporation instruments are truly modern industry solutions. Increased automation and the ability to process multiple samples in parallel increases efficiency, accuracy, safety, and limits repetition. Designed with versatility and reliability in mind, both SyncorePlus and Multivapor<sup>TM</sup> are parallel evaporation workhorses that can fit into any workflow.

#### Environmental Analysis



Concentrate your samples quickly and efficiently in order to accurately monitor pollutant levels in the environment.

#### Testing



Achieve the highest sample throughput and increase safety to reduce processing time and costs.

Application

- · Concentration
- · Solid phase extraction
- · Concentration
- · Solid phase extraction
- · Evaporate to dryness

Sample

Soil, sludge, water, waste

Soil, sludge, water, waste

Analyte

PAH, PFC, TPH, POP PCDD/PCDF, PCB, pesticides, herbicides

SVOC, PCB, PAH, PCDD/PCDF, PCB pesticides

Solution:

SyncorePlus Analyst «Pre-Analytical»

SyncorePlus Polyvap «Throughput»

Multivapor™ «Essential»

#### Food/Beverage



Chemical



Pharmaceutical



Use the most advanced parallel evaporation processes for quality assurance and the development of ingredients.

Streamline your quality control and research and development workflows by preparing multiple samples simultaneously.

Ensure the highest levels of quality control and safety in the development of new compounds.

- · Concentration
- · Solid phase extraction
- · Evaporate to dryness
- · Concentration
- · Evaporate to dryness
- · Evaporate to dryness

Water, seafood, meat, dairy

Textiles, plastics, petrochemicals

Drugs

PCB, pesticides, ethyl carbamate

Azo dyes, plasticizers, oil, grease

API

SyncorePlus Analyst «Pre-Analytical»

SyncorePlus Polyvap «Throughput»

Multivapor™ «Essential»



# **Parallel Evaporation Procedure** Streamline your workflow

Whatever the application, we offer solutions to increase your sample throughput and meet your needs. No matter the amount or volume of your sample or whether you want to concentrate or evaporate to dryness, BUCHI has the appropriate solution at hand.

Steps before evaporation	Sampling, Synthesis, Extraction, Purification or Solid Phase Extraction			
Parallel evaporation step		Parallel Evaporation		
Application	Concentration to a predefined residual volume of 0.3, 1 or 3 mL	Drying or evaporation	Drying or evaporation	
Number of samples	Multiple samples 4, 6 or 12	Multiple samples 4 up to 96	Multiple samples 6 up to 12	
Sample volume Minimum Maximum	5 mL 500 mL	0.5 mL 500 mL	0.5 mL 240 mL	
Degree of automation	•••	•••	•	
Evaporation performance	•••	•••	••	
Solutions by BUCHI	SyncorePlus Analyst «Pre-Analytical» p. 11	SyncorePlus Polyvap «Throughput» p. 13	Multivapor™ «Essential» p. 15	
Steps after evaporation	Analysis		Purification	



# **SyncorePlus**

# Synchronized sample solutions

Our SyncorePlus parallel evaporation instrument comes in two configurations; the SyncorePlus Analyst «Pre-Analytical» and the SyncorePlus Polyvap «Throughput».

**Analyst:** specially designed to evaporate samples to a specified volume as a pre-analytical step. **Polyvap:** explicitly created with increased sample throughput in mind.

Each of our SyncorePlus instruments benefits from advanced automation, gentle evaporation conditions, and enhanced safety features.



#### Start and walk away

SyncorePlus is fully automated and easy to use, allowing you to proceed with other tasks while it gets on with the job at hand.

Process automation ensures the highest analytical precision and safety standards.



#### **Gentle evaporation conditions**

Perform a fast and gentle evaporation process with vacuum-vortex evaporation that ensures the protection of volatile and heat-sensitive analytes, even when using high boiling point solvents such as water, DMSO, or DMF. Decreasing pressure to reduce the boiling point improves energy efficiency.



#### Safe and environmentally friendly

Our sophisticated condenser system and highly efficient peripheral instruments ensure the safety of users and the environment.

The secondary condenser prevents vapor from leaking into the atmosphere.

#### Full automation with the Interface I-300 Pro

The unique interface for numerous peripheral evaporation instruments from BUCHI.

- · Specify evaporation methods
- · Predefine specific solvents
- · Achieve high analytical precision
- · Ensure a safe process
- · Simplify your workflow
- · Start the process and walk away





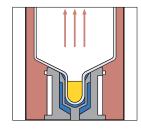
# SyncorePlus Analyst «Pre-Analytical»

Flexible, sustainable, and efficient



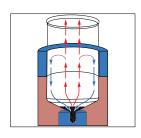
#### Flexibility & Adaptability

We designed SyncorePlus Analyst to accommodate your specific workflow and sample requirements. Safely and efficiently concentrate up to 12 samples to a predefined residual volume, ranging from 0.3 mL, 1 mL, to 3 mL per sample. With interchangeable racks and a wide range of accessories, create the perfect system for your needs.



#### Intelligent design for sustainability & safety

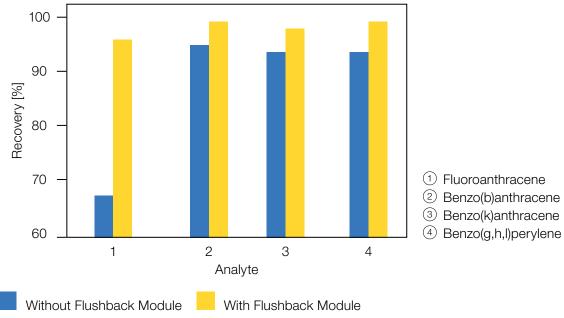
Intelligent design ensures recoveries and enhances sustainability and safety. Individual sample sealing and the use of inert materials inhibit cross-contamination. Additionally, a cooled appendix protects heat-sensitive analytes. This unique design ensures safety, with no loss of volatile compounds.



#### **Enhance your efficiency**

Making use of our Flushback Module will enable you to achieve the highest analyte recoveries and most reliable results. The Flushback Module for the R-6 and R-12 rack improves recovery rates by flushing back analyte that adheres to the glass walls with condensed vapor during the evaporation process. An additional Crystal Rack is available for the R-4 and R-6 racks that make the entire evaporation process completely observable.

#### Higher recovery rates achieved with the Flushback Module





# SyncorePlus Polyvap «Throughput» Maximize productivity



#### Interchangeable racks

We offer a broad selection of racks to accommodate any workflow or throughput; from our specially designed Crystal Racks that come in four or six positions and provide full visibility of the sample during evaporation; to our EasyFill Racks that come in 12, 24, 48, and 96 positions. Increase productivity, save energy and reduce costs with our numerous parallel evaporation solutions.



#### Volume versatility

Our instruments can accommodate BUCHI's Polyvap glass tubes of all sizes in 4, 6, and 12 rack positions with working volumes ranging from 0.5 mL to 500 mL. Additionally, third party test tubes are compatible with our 24, 48, and 96 position racks. Thanks to its vacuum vortex technology, our SyncorePlus Polyvap «Throughput» significantly improves sample throughput gently and economically.



#### **Materials matter**

All relevant parts of the SyncorePlus take advantage of the highest quality materials. Borosilicate glass was chosen for its low coefficients of thermal expansion. PTFE, for its hydrophobic properties as well as its high density; and EPDM for its resistance to heat. These materials are chemically inert and also resistant to all sorts of aggressive chemicals, most organic solvents, petrochemicals, and oils.

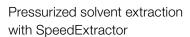
#### **Example evaporation rates for SyncorePlus Polyvap**

SyncorePlus R-12 Polyvap, V-300, F-305, starting volume 100 mL/position (total 1200 mL) Conditions: Base = 60°C, Cover = 50°C, F-305 = 10°C, rotation speed 300 rpm

Solvent	Time to dryness [min]	Evaporation rate per position [mL/h]	Rate overall [mL/h]
Acetone	50	121	1452
Dichloromethane (DCM)	52	115	1375
Ethanol	82	73	880
Ethyl acetate	43	138	1656
n-Hexane	31	192	2302
Methanol	101	60	716
Toluene	43	138	1660
Water	273	22	271

# Streamline your workflow







Sample transfer from SpeedExtractor to Multivapor™



Solvent evaporation on Multivapor™

Supports PSE (ASE) collection vessels, pooled or non-pooled samples from chromatography, and Radleys Carousell reaction samples.



# Multivapor™ «Essential»

# Efficient evaporation for multiple samples



#### **Optimize your performance**

The Multivapor™ requires little training due to its smooth and intuitive operation. Tailored to maximize efficiency and safety as you no longer have to transfer samples between vessels manually.



#### Ready to adapt

The Multivapor<sup>™</sup>, designed to fit into any lab, is compatible with a wide range of sample tubes. Save time and minimize steps by using your existing glassware with one of our numerous vessel-specific adapters. For the complete list of adapters, please refer to our adapter guide.

Vessel specification	Multivapor P-6	Multivapor P-12
Number of samples	6	12
Working volume	up to 240 mL	up to 60 mL
Max. outer diameter	14 – 58 mm	14 – 30 mm
Max. length	70 – 150 mm	70 – 150 mm





# **Product overview**The best solution for your needs



Needs/Solution	Multivapor™	SyncorePlus	
Application	P-6 / P-12 Essential	Polyvap Throughput	Analyst Pre-Analytical
Evaporation	•	•	•
Drying	•	•	•
Concentration	-	-	•
Solid Phase Extraction (SPE)	_	•	•

#### Characteristics

Automation	•	• • •	• • •
Vessel types	adaptable	fix	fix
Number of samples	6 / 12	4 / 6 / 12 / 24 / 48 / 96	4/6/12
Temperature range	30 - 100 °C	30 - 100 °C	30 - 100 °C
Working volume	0.5 - 240 mL	0.5 - 500 mL	5 - 500 mL
Flushback module	-	•	•
Inert condition	-	•	•











Available in a bundle	Vacuum Pump	Int	terface	Ch	iller
	V-300	I-300	I-300 Pro	F-305	F-308
Multivapor™	•	•	•	-	-
SyncorePlus	•	_	•	•	•

#### **Characteristics**

Temperature range	-	_	-	-10 - :	25 °C
Cooling capacity @ 15 °C	-	_	_	550 W	900 W
Suction capacity	1.8 m³/h		-	-	_
Final vacuum	< 5 mbar		_	-	_
Solvent library	-	•	•	-	_
Vacuum gradient	_	_	•	_	_





Compatible products	Vacuum Pump	Chiller
	V-600	F-314
Temperature range	-	-10 - 25 °C
Cooling capacity @ 15 °C	_	1400 W
Suction capacity	3.1 m³/h	-
Final vacuum	1.5 mbar	-

# Accessories

# Multivapor™





P-6

Evaporation Unit	11058090
Rotavapor® setup	048740



Evaporation Unit	11058092
Rotavapor®	048740
setup	

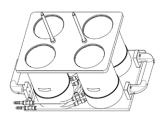
## Adapters



See Multivapor™ Adapter Guide

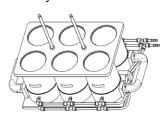
# SyncorePlus Analyst

Crystal Rack R-4



Rack		047794
Tubes	3.0 mL	047740
	1.0 mL	047741
	0.3 mL	047742
Cover		038245

Crystal Rack R-6

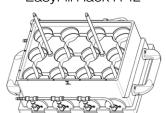


Rack

047777

Tubes	3.0 mL	038557
	1.0 mL	038575
	0.3 mL	038168
Cover		038246
Flushba Module	2011	048654

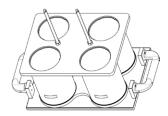
EasyFill Rack R-12



Rack		046000
Tubes	Tubes 3.0 mL	
	1.0 mL	046071
	0.3 mL	046072
Cover		040910
Flushback Module		046036

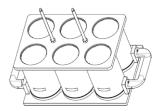
# SyncorePlus Polyvap

# Crystal Rack R-4



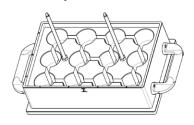
Rack	047790
Tubes	038487
Cover	038245

# Crystal Rack R-6



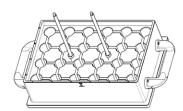
Rack	047770
Tubes	038486
Cover	038246

#### EasyFill Rack R-12



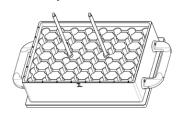
Rack	040900
Tubes	040907
Cover	040910

EasyFill Rack R-24



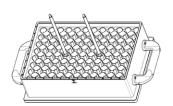
Rack		042660
Tubes	Falcon Tubes	third party
	PSE/ ASE Vials	049535
Cover		040920

EasyFill Rack R-48



Rack	042855
Tubes	042845
Cover	042850

EasyFill Rack R-96

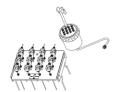


Rack	038277
Tubes	038543
Cover	040930

# SyncorePlus SPE

Module Cover









	Basic	Advanced	Basic	Advanced
R-6	-	11055465	-	11055466
R-12	051440	051164	051438	051448
R-24	051463	-	051439	11062933



# **Service & Training**

# **BUCHI Service packages**

#### **BUCHI START - The highest efficiency from the very beginning**

From professional installation to a carefree agreement that will leave you with full cost predictability and the highest possible system efficiency. <a href="https://www.buchi.com/start">www.buchi.com/start</a>

#### «Install»

- · Product installation and testing
- · Hands-on training from a certified technician
- · Evaluation of the immediate surroundings of your new product
- · Best integration of your new product into the existing infrastructure

#### «IQ/OQ»

- · Product or system installation
- · Installation and Operational Qualification

#### **BUCHI EXACT - Certified accuracy for the highest level of confidence**

Receive comprehensive qualifications with all of your BUCHI products. We perform qualification services on a level that can only be achieved by the manufacturer. <a href="www.buchi.com/exact">www.buchi.com/exact</a>

#### «OQ»

- · Our one-time OQ service will provide you with all the necessary documents and certificates.
- The service team will remind you about the option for a follow-up OQ before the certificates expire.

#### «OQ Circle»

Buying an OQ package will grant you an additional discount on the documents and offer you priority service with automated visit scheduling.

#### **BUCHI CARE - Unbeatable Reliability**

Maintaining a heavily used device requires different parts and inspection frequencies than units that are operated occasionally. Our approach considers factors like these to provide you with an optimal yet cost-efficient solution. <a href="https://www.buchi.com/care">www.buchi.com/care</a>

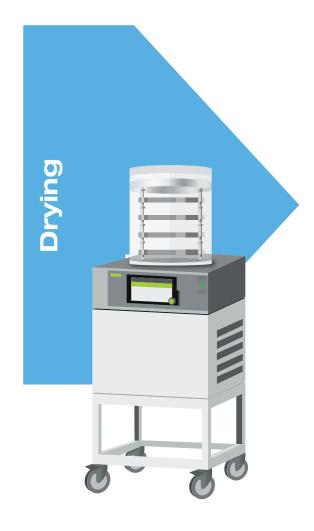
# **BUCHI ACADEMY - Increase your know-how, get the edge over your competition**

Expert know-how is provided by the application chemists in our competence centers in Flawil, Beijing, and Mumbai and the locally available experts at our market organizations.

Our scientific support offers pre-sales feasibility studies, tailored solution offers, after-sales onsite support, regular basic to advanced courses, and on-demand customized training. www.buchi.com/academy

# Complete your portfolio





#### Mixer

The Mixer B-400 combines optimal homogenization efficiency with simple operation. It is an essential tool for sample preparation within your analysis process chain.

#### **Freeze Drying**

The compact Lyovapor™ L-200 offers high-quality Freeze Drying (-55 °C, 6 kg) with a high level of automation. Infinite-Control™ includes easy method creation, method running, data logging, chart recording in real-time, and interruption if needed from anywhere at any time.



# Solid Phase Extraction/ Evaporation

#### **Extraction**

The SpeedExtractor is your best solution for fast Pressurized Solvent Extraction (PSE). Increase productivity by processing up to 6 samples in parallel. Streamline the workflow of your sample preparation thanks to ease of sample loading and ready-to-use extract collection.

#### **Parallel Evaporation**

Our specially designed SyncorePlus parallel evaporation instruments can evaporate samples to a specified volume (Analyst) or handle explicitly created with increased sample throughput (Polyvap). The SyncorePlus SPE combines evaporation and conventional solid-phase extraction (SPE) - an essential step in many analytical procedures - in one device.

# Core messages to our customers

# BUCHI creates added value

«Quality in your hands» is the guiding principle that shapes our philosophy and our actions. It challenges us to provide outstanding services that are precisely tailored to your needs. This means that we must stay in close contact with our customers. That is why we keep in touch and continue to work very hard to understand you and your business even better.

We help you by providing high-quality products, systems, solutions, applications and services that offer you added value. This allows you to focus entirely on your processes and your work.



#### Competent

We have the technological expertise and decades of experience needed to provide competent support and work with you to continually improve our services.



#### Reliable

We guarantee the quality and functionality of our equipment and will continue to help you quickly and efficiently whenever something does not operate to your satisfaction.



#### Safe

By collaborating closely with you, we do everything in our power to make our products, systems, solutions, applications and services as safe as possible for people and the environment.



#### **Cost-effective**

We strive to create a high level of economic benefit and maximum added value for you.



#### Global

As an international family-owned business with own subsidiaries and qualified distributors, we have a presence wherever you are located.



#### Easy

We support you by providing carefully designed solutions as well as instruments and systems that are easy to operate.



#### Sustainable

We support environmentally friendly processes and manufacture products that have a long service life. We utilize advanced technologies to leave the smallest environmental footprint possible.

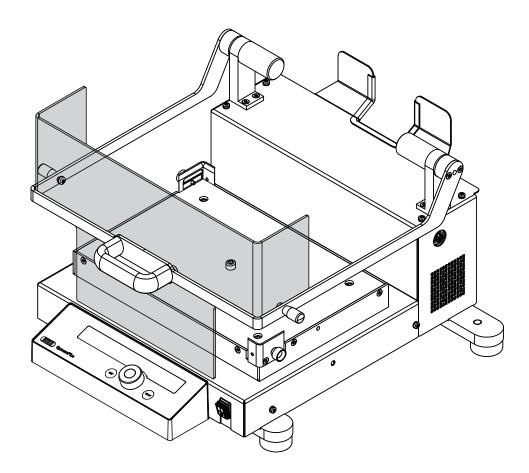
BÜCHI Labortechnik AG
CH – 9230 Flawil
T +41 71 394 63 63
F +41 71 394 64 64
info@buchi.com



# **SyncorePlus**

# Technical data sheet

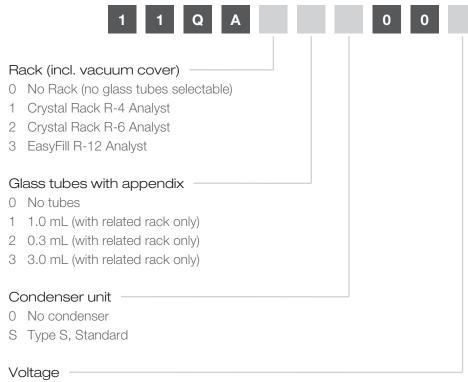
With the SyncorePlus BUCHI is offering a solution for a fast, gentle and environment-friendly multiple sample concentration to a predefined volume. Thanks to the orbital vortex movement, the water chilled appendix, individual sealing and a heatable cover, cross-contamination can be inhibited and recoveries can be maximized. Profit from a verified solution including vacuum pump, vacuum controller and recirculating chiller to get even more advantage for your sample workup in an fully automated way.





# Order code SyncorePlus Analyst

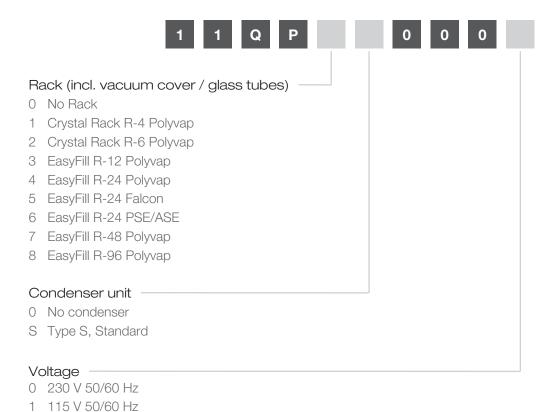
Choose the configuration according to your needs:



- 0 230 V / 50/60 Hz
- 1 115 V / 50/60 Hz
- 2 100 V / 50/60 Hz

# Order code SyncorePlus Polyvap

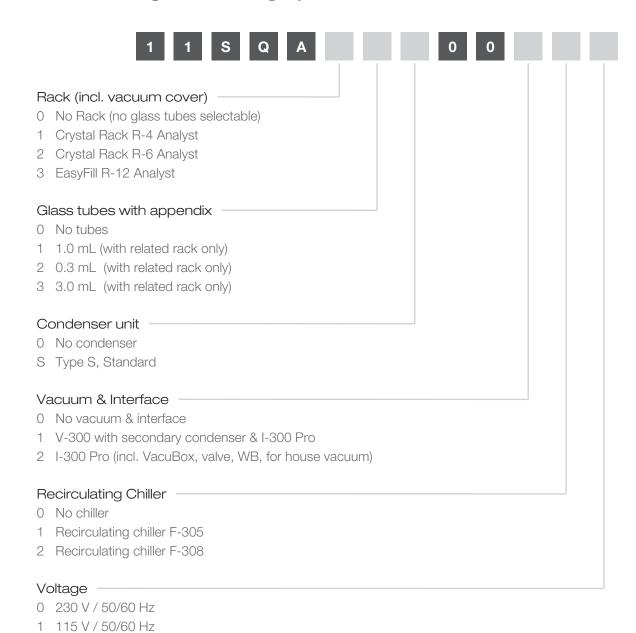
Choose the configuration according to your needs:



2 100 V 50/60 Hz

### Order code SyncorePlus Analyst Systems

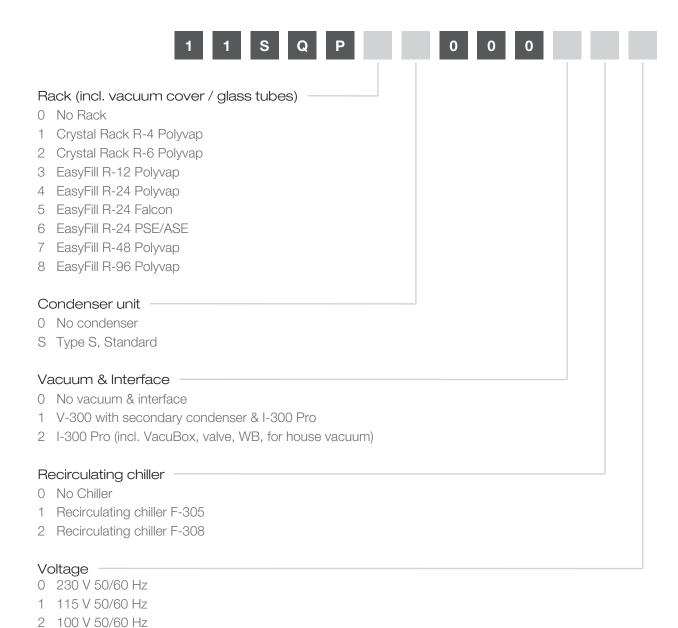
Choose the configuration according to your needs:



2 100 V / 50/60 Hz

# Order code SyncorePlus Polyvap Systems

Choose the configuration according to your needs:



# Scope of delivery

All configurations are supplied ready to use.

	SyncorePlus
SyncorePlus platform	1
Condenser unit	1*
Rack	1*
Heater cover	1*
Tubes	1*
Power cord	
Vacuum tubing	
Cooling water tubing	

<sup>\*</sup>According to the order code

# Technical data

# SyncorePlus

	SyncorePlus 100 V	SyncorePlus 115 V	SyncorePlus 230 V
Dimensions (W x D x H) (main unit)	500 x 520 x 325 mm	500 x 520 x 325 mm	500 x 520 x 325 mm
Weight (main unit)	30 kg	30 kg	30 kg
Minimum clearance left & right	150 mm	150 mm	150 mm
Minimum clearance back	80 mm	80 mm	80 mm
Connection voltage	100 ± 10 % VAC	115 ± 10 % VAC	230 ± 10 % VAC
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Power consumption	1250 W	1250 W	1400 W
Power consumption heater cover	120 W	120 W	120 W
Rotation speed range	60 - 400 rpm	60 - 400 rpm	60 - 400 rpm
Temperature range heater cover	20 - 70 °C	20 - 70 °C	20 - 70 °C
Temperature range heater base	20 - 100 °C	20 - 100 °C	20 - 100 °C
Temperature accuracy at 100 °C	+/- 1°C	+/- 1°C	+/- 1°C
Temperature accuracy at 120 °C (Service test)	+/- 2 °C	+/- 2 °C	+/- 2 °C
Fuse (100 / 115 V)	SPT 12.5	SPT 12.5	FST 10
Connections external valves (MiniDIN)	24 V ± 5 %	24 V ± 5 %	24 V ± 5 %
Connections communication (COM)	$30 V \pm 5 \%$	$30 V \pm 5 \%$	$30 V \pm 5 \%$
Overvoltage category	II	II	II
IP Code	IP 20	IP 20	IP 20
Pollution degree	2	2	2
Approvals	CE/CB	CE/CB	CE/CB

# Spare parts and accessories

# Racks

# Analyst racks

	Order no.	Image
Crystal Rack R-4 Analyst with residual volume cooling For a maximum working volume of up to 4 x 500 mL, without glass tubes	047794	
Crystal Rack R-6 Analyst with residual volume cooling For a maximum working volume of up to 6 x 250 mL, without glass tubes	047777	
EasyFill Rack R-12 Analyst with residual volume cooling For a maximum working volume of up to 12 x 120 mL, without glass tubes	046000	
Polyvap racks	Order no.	lmage
Crystal Rack R-4 Polyvap For working volumes of up to 4 x 500 mL	047790	
Crystal Rack R-6 Polyvap For working volumes of up to 6 x 250 mL	047770	
EasyFill Rack R-12 Polyvap For working volumes of up to 12 x 120 mL, without glass tubes	040900	
EasyFill Rack R-24 Polyvap For working volumes of up to 24 x 30 mL, without glass tubes	038188	

	Order no.	lmage
EasyFill Rack R-24 Polyvap PSE/ASE vials with OD = 27 mm For working volumes of up to 24 x 60 mL, without glass tubes	042660	
EasyFill Rack R-48 Polyvap	042855	
For working volumes of up to 48 x 20 mL		
EasyFill Rack R-96 Polyvap	038277	
For working volumes of up to 96 x 10 mL, without glass tubes		
Cover	Order no.	lmaga
Vacuum Cover R-4 with PTFE sealing disks	038245	lmage
Actively heated vacuum cover with individual sample connection	000240	
Vacuum Cover R-6 with PTFE sealing disks	038246	
Actively heated vacuum cover with individual sample connection		
Vacuum Cover R-12 with PTFE sealing disks	040910	
Actively heated vacuum cover with individual sample connection		
Vacuum Cover R-24 with PE sealing disks	040920	
Actively heated vacuum cover with individual sample connection		
Vacuum Cover R-48 with PE sealing disks	042850	
Actively heated vacuum cover with individual sample connection		

040930

Actively heated vacuum cover with individual sample connection



#### Flushback Module

	Order no.	Image
Flushback Module R-6	048654	
For higher recovery rates in combination with Crystal rack R-6 Analyst		
Flushback Module R-12	046036	
For higher recovery rates in combination with EasyFill rack R-12 Analyst		

# Tubes

# Analyst tubes

	Order no.	Image
Set of 4 graduated glass tubes for Crystal rack R-4 Analyst, residual volume 3.0 mL	047740	
Working volume up to 500 mL		
Set of 4 graduated glass tubes for Crystal rack R-4 Analyst, residual volume 1.0 mL	047741	
Working volume up to 500 mL		
Set of 4 graduated glass tubes for Crystal rack R-4 Analyst, residual volume 0.3 mL	047742	
Working volume up to 500 mL		
Set of 6 graduated glass tubes for Crystal rack R-6 Analyst, residual volume 3.0 mL	038557	
Working volume up to 250 mL		
Set of 6 graduated glass tubes for Crystal rack R-6 Analyst, residual volume 1.0 mL	038575	
Working volume up to 250 mL		

	Order no.	Image
Set of 6 graduated glass tubes for Crystal rack R-6 Analyst, residual volume 0.3 mL	038168	
Working volume up to 250 mL		
Set of 12 graduated glass tubes for EasyFill rack R-12 Analyst, residual volume 3.0 mL	046070	
Working volume up to 120 mL		
Set of 12 graduated glass tubes for EasyFill rack R-12 Analyst, residual volume 1.0 mL	046071	
Working volume up to 120 mL		
Set of 12 graduated glass tubes for EasyFill rack R-12 Analyst, residual volume 0.3 mL	046072	
Working volume up to 120 mL		

# GL45 thread amber tubes

	Order no.	Image
Set of 12 graduated amber glass tubes GL45 for EasyFill rack R-12 Analyst, residual volume 1.0 mL	11056910	
Working volume up to 100 mL		
Set of 12 graduated amber glass tubes GL45 for EasyFill rack R-12 Analyst, residual volume 0.3 mL	11056911	
Working volume up to 100 mL		

# GL45 thread tubes

	Order no.	Image
Set of 12 graduated glass tubes GL45 for EasyFill rack R-12 Analyst, residual volume 1.0 mL	11056498	
Working volume up to 100 mL		
Set of 12 graduated glass tubes GL45 for EasyFill rack R-12 Analyst, residual volume 0.3 mL	11056499	
Working volume up to 100 mL		

# Polyvap tubes

	Order no.	Image
Set of 4 glass tubes for Crystal Rack R-4 Polyvap	038487	
Working volume up to 500 mL		
Set of 6 glass tubes for Crystal Rack R-6 Polyvap	038486	
Working volume up to 250 mL		
Set of 12 glass tubes for EasyFill Rack R-12 Polyvap	040907	
Working volume up to 120 mL		
Set of 24 glass tubes for EasyFill Rack R-24 Polyvap	038469	9
Total volume 55 mL, 25 x 150 mm (d x h)		
Set of 72 glass tubes for EasyFill Rack R-24 PSE/ASE	049535	
Total volume 60 mL, 27 x 135 mm (d x h)		
Set of 100 standard test tubes for EasyFill Rack R-48	042845	9
Total volume 34 mL, 20 x 150 mm (d x h)		
Set of 100 standard test tubes for EasyFill Rack R-96	038543	9
Total volume 17 mL, 16 x 130 mm (d x h)		

# Gaskets

	Order no.	Image
Set of 6 sealing disks for Vacuum Cover R-4 or R-6, PTFE	038488	'
Set of 12 sealing disks for Vacuum Cover R-12, PTFE	040906	
Set of 24 sealing disks for Vacuum Cover R-24, PE	038489	
Set of 50 sealing disks for Vacuum Cover R-48, PE	046591	
Set of 100 sealing disks for Vacuum Cover R-96, PE	038490	

# Sample preparation rack

	Order no.	Image
Sample preparation rack R-4 (metal rack 4 positions)	040075	
Sample preparation rack R-6 (metal rack 6 positions)	040076	
Sample preparation rack R-12 (metal rack 12 positions)	040077	
Condenser		
	Order no.	Image
Condenser unit type S, cpl.	11070721	
Including a 2000 mL receiving flask		
Refrigerated receiving flask 3000 mL with internal cooling loop, open	11061399	
Receiving flask		
		Order no.
Glass, BJ35/20, 1000 mL, P+G		020728
Glass, BJ35/20, 2000 mL, P+G		025265
Cocking lever		
	Order no.	Image
3-star knob for the vacuum cover	041840	
Set of 2 quick handle, star-shaped	11070467	
Sleeves		
		Order no.

11058510

# Accessories SPE configuration

	Order no.	lmage
SPE Basic Module format 12 with 2 way valve	051440	
SPE Basic Cover format 12 with 2 way valve	051438	
SPE Basic Module format 24 with 2 way valve	051463	
SPE Basic Cover format 24 with 2 way valve	051439	
SPE Advanced Module format 6 with 3 way valve and waste vessel	11055465	
SPE Advanced Cover format 6 with 3 way valve and waste vessel	11055466	
SPE Advanced Module format 12 with 3 way valve and waste vessel	051164	
SPE Advanced Cover format 12 with 3 way valve and waste vessel	051448	

	Order no.	lmage
Set of 2 SPE lock nuts	051464	
		0
Flow-control valve, single	051129	
Set 12 O-rings for set 12 Flow-control valve	051453	
Set comprising of 6 flanged FEP tubes	051459	
Set of 12 FKM O-rings	051496	
12 port waste manifold	051445	
		0000
6 port waste manifold	11055463	
o port Waste Marinola	11000100	
Gasket FPM to waste vessel	040471	
Glass cylinder for the SPE waste vessel	051444	
FEP tube waste	051467	
condenser including GL 14 caps and seals	301701	
condenser including de 14 caps and seas		
		<b>~</b>
Three-way stopcock	051163	
		0

	Order no.	lmage
Set comprising of 12 SPE three-way stopcocks	051457	
Set of 4 FEP tube clips	051458	
For bundle the hoses		
Set of 12 FEP elution tubes	051492	
Use between 3 way tap and waste vessel		
Support for the three-way stopcocks	051493	
1 Set fittings 3.2 (25 units)	040956	
Use for attaching the hoses to the 3-way tap and the waste vesse	I	
1 Set seal cones 3.2 (green, 25 units)	040961	
Use with 04956 for attaching the hoses to the 3-way tap and the waste vessel		
Sidebar with feet	051465	
Syncore / SyncorPlus tool	11057214	

#### Sensors

	Order no.	lmage
Vapor temperature sensor. Incl. cap nut, seal GL14	11060707	
Measures the vapor temperature inside the system. Meant to be used with the Interface I-300 / I-300 Pro.		
AutoDest sensor. Incl. cap nut, seal GL14	11059225	
For automatic distillation. Measures temperature of cooling media and the vapor temperature. Vacuum is adjusted according to cooling capacity of condenser. Meant to be used with the Interface I-300 / I-300 Pro and glass assembly V, HP or S.		

# Tubing

	Order no.
Ribbed PFA vacuum hose, 600 mm	049634
Spiral vacuum tube (600 mm) with SVL22 connectors	
Set of 2 PTFE sealings SVL22	048899
Set consisting of 2 PTFE sealing rings (SVL22) for the vacuum hose (049634)	
Tubing. Silicone, Ø6/9 mm, transparent, per m	004133
Use: Cooling media.	
Tubing. Synthetic rubber, Ø6/13 mm, black, per m	11063244
Use: Vacuum.	

## Hose barbs

	Order no.	lmage
Hose barb. Bent, GL14, incl. silicone seal	018916	
Hose barbs, set. 2 pcs, bent (1), straight (1), GL14, silicone seal  Content: Hose barbs, cap nuts, seals	041939	
Hose barbs. set. 3 pcs, bent, GL14, silicone seal Content: Hose barbs, seals.	041987	
Hose barbs, set. 4 pcs, bent GL14, silicone seal Content: Hose barbs, cap nuts, seals	037287	TO T
Hose barbs, set. 4 pcs, straight, GL14, silicone seal Content: Hose barbs, cap nuts, seals	037642	
Hose barbs. set. 6 pcs, bent (4), straight (2), GL14, silicone seal Content: Hose barbs, cap nuts, seals.	038000	

# Tools

	Order no.
Hose cutter	019830

	Order no.
Turix wrench	044349

#### Service

	Order no.
SyncorePlus IQ/OQ documentation for first installation and operation qualification	11071011
SyncorePlus Repeating OQ	11071012