

THE ESSENTIAL SYSTEMS & CONSUMABLES FOR HIGH PERFORMANCE LC PURIFICATION & MASS SPECTROMETRY



 **Advion Interchim**
scientific

TWO COMPANIES, ONE GOAL BEST-IN-CLASS SOLUTIONS FOR SCIENTISTS



Dear Customers,

Sharing a customer-focused company vision, a taste for excellence with state-of-the-art product solutions and working hand in hand for eight years, it was natural that **Advion**, a well known player in the world of mass spectrometry and chromatography products, and **Interchim**, a global provider of instrumentation and consumables for life sciences, research and industry would strengthen their ties to accompany their customers and partners even further.

We are happy to introduce you the new **Advion Interchim Scientific**. We manufacture and deliver tailored solutions to improve our customers' most challenging identification, quantification, and purification needs with our broad range of innovative instruments, consumables, reagents, and scientific expertise.

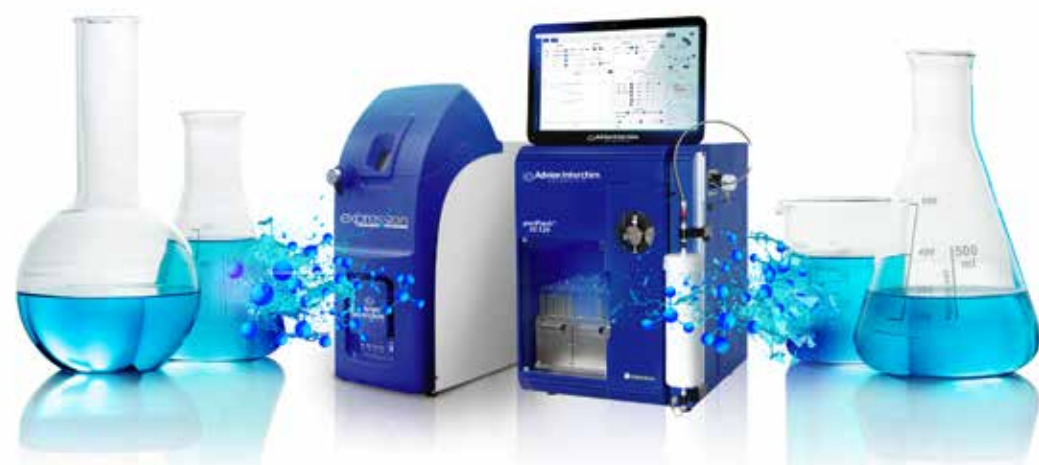
Our unrivaled portfolio ranges from media and columns to consumables, accessories and instruments for flash chromatography, preparative (U)HPLC, analytical (U)HPLC, mass spectrometry, ICP-MS, coupled with intelligent apps and software.

You can find all our products on our websites advion-interchim.com, advion.com and flash-chromatography.com, as well as our application notes and tips and tricks in our blog articles. Both technical and support services from **Interchim** and **Advion** remain at your disposal to help you overcome your challenges and to choose the most appropriate product solutions.

Strategically aligned for global growth, we recognize that our success has always come from our customers, and we are dedicated and committed to providing best-in-class service and support worldwide.

From our respective headquarters in the United States and France, our subsidiaries, and our independent distributors network, we thank you for your confidence and we are proud to accompany you in the success of your projects.

Advion Interchim Scientific



GET A LC PURIFICATION PLATFORM AS UNIQUE AS YOUR WORK!

Customize the puriFlash® 360° suite for your unique needs



Key features:

- Simplicity: Powerful, easy-to-use features
- A wide range of technology requiring minimal bench space to improve the chemists' workflow
- Easy, multi-profile software that requires minimal training with the InterSoft®X software for flash systems and Mass Express® software suite for mass spectrometry
- Fast and easy sample preparation with multi-mode mass spec and streamlined purification workflows

Low to high pressure LC purification of small & large molecules with 3X detection UV, ELSD & MS

The puriFlash® 360° LC Purification Platform combines Simplicity and best-in-class design to make chemists purifications by liquid chromatography easier, intuitive, and even more productive. No matter your expertise level, the platform piloted by InterSoft®X software with Genius artificial intelligence, allows routine to sophisticated RP purification of small organics, natural products, peptides and proteins. You can stay focused on your job knowing you will achieve the best purification as possible. There is no risk of product loss thanks to sensors, overpressure management, and pauses. The platform runs 24/7 and requires minimal service and training.

Small, but Mighty the puriFlash® XS 520 Plus (300mL/min @ up to 20bar) is the ideal entry system for routine NP purification of small organics. The puriFlash® 5.250 (up to 250bar) offers a second dimension to enlarge the separation potential to isolate safely high value compounds.

INTRODUCTION TO INTELLIGENT FLASH PURIFICATION

WHAT IS INTELLIGENT PURIFICATION?

Breaking the synthesis, purification and characterization process into simple steps using fast prep-free analytical techniques and AI assistance to make flash purification easy.

WHY INTELLIGENT PURIFICATION?

Because you have better things to do than guess the best purification method. Because your confidence in your purified product is of the utmost importance.

THREE SIMPLE STEPS TO INTELLIGENT PURIFICATION

STEP 1: PERFORM YOUR REACTION & MONITOR USING TLC/CMS



REACT IT



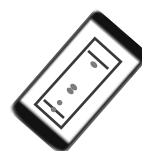
SPOT IT



PRESS BUTTON: MASS SPECTRA DIRECTLY FROM TLC PLATE <30s

Push-button analysis of TLC with the Plate Express TLC plate reader & expression Compact Mass Spectrometer

STEP 2: USE FLASH PURIFICATION TO PURIFY YOUR COMPOUND



TAKE A TLC PIC WITH PHONE



FLASH SYSTEM CREATES METHOD FOR YOU



SIT BACK, RELAX: LET FLASH PURIFICATION RUN COMPLETE

The puriFlash® flash purification system software selects the gradients, the column and more for max yield

STEP 3: CONFIRM THE ID OF YOUR COLLECTED FRACTIONS



LOCATE FRACTION



DIP PROBE IN IT



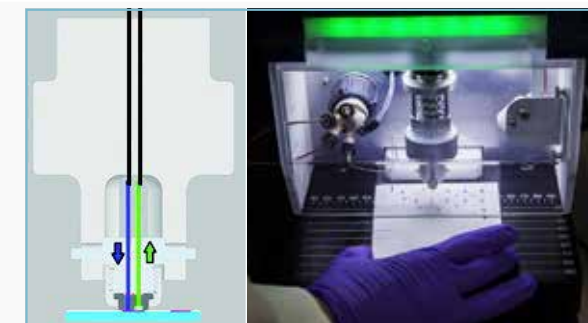
PUT PROBE INTO MASS SPEC: RESULTS IN <30 SECONDS

Use the ASAP Probe with expression CMS to confirm fractions, just dip in tube and insert for ID in <30s

INTELLIGENT FLASH PURIFICATION: A CLOSER LOOK

STEP 1: REACTION MONITORING USING TLC

Following a reaction, an aliquot is taken and spotted on a silica TLC plate and developed in solvents. The reaction is then monitored by TLC/CMS - the Plate Express coupled to the expression Compact Mass Spectrometer for push-button MS analysis of the TLC plate. The system identifies spots unambiguously by taking a mass spectrum directly from the TLC plate.



STEP 2: TLC to FLASH: PURIFYING YOUR COMPOUND

The TLC separation information will now be used to intelligently program the Interchim puriFlash system directly from the TLC plate image to give optimal separation for fraction collection. Now that the product is confirmed using the Plate Express, it is prepared for purification using the puriFlash® XS520. We begin the process by executing an app—the TLC to Flash Converter, giving us the power to purify our compound using our cell phone or tablet.

To do so, the TLC plate is photographed. A title or identification details are entered, the solvent front and product of interest, how much to purify, and the solvents used. The data is then wirelessly sent to the puriFlash system where the Genius software assists in building the remainder of the method.

The screen shows the total UV profile after the run, and using the touch-screen functionality you can find where in the fractions the peaks are located for fraction confirmation analysis in the next step.



STEP 3: FRACTION ID IN <30 SECONDS WITH ASAP/CMS

Flash fractions are located from their UV profile. They need to be confirmed to ensure they have eluted as expected. You can then take the central fraction for each compound and analyze them by ASAP/CMS.

The ASAP sampling technique for the expression Compact Mass Spectrometer is the final step to confirm fractions in seconds by simply dipping the probe in the preidentified tube, and inserting it directly into the mass spec.



SUMMARY

Intelligent Flash Purification featuring the expression CMS, the Plate Express and ASAP sample techniques, and the puriFlash® flash chromatography system offers easy sampling techniques, intuitive software, and advanced detection technology. Using this streamlined workflow you can easily and confidently synthesize, characterize and purify your compound. The intuitive workflow ensures that:

- The correct TLC spot is identified for purification using the Plate Express and expression CMS.
- An optimized Flash method is recommended and programmed using the Interchim puriFlash® XS520 and Genius software
- Flash fractions are identified with the ASAP dipping probe and expression CMS

ULTRA HIGH PERFORMANCE PURIFICATION

puriFlash® XS 520 Plus

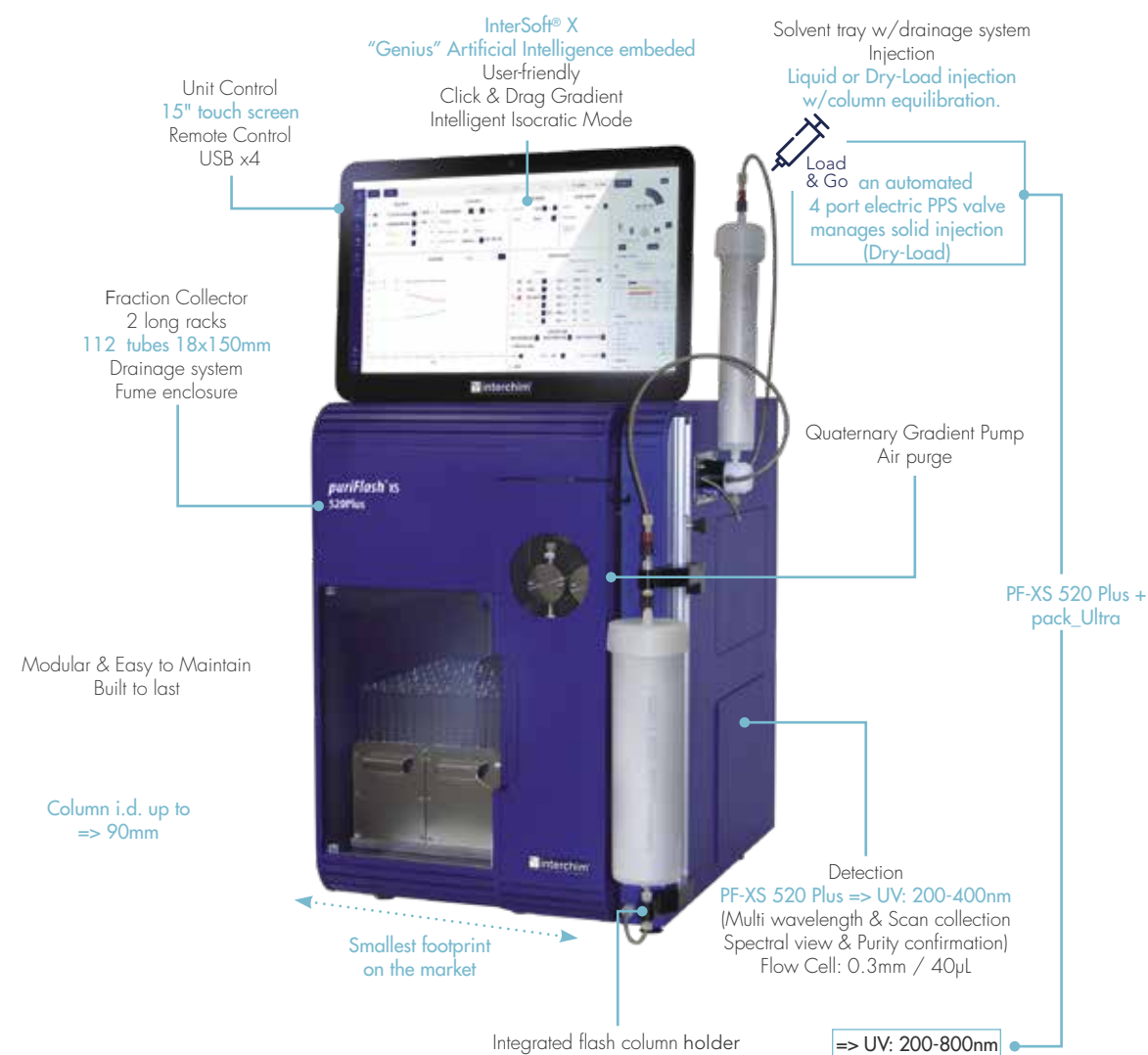
Small Organic molecules
 Impurities Identification
 Natural Products
 Peptides, Oligonucleotides
 Proteins, Bio-drugs
 Metabolites Isolation
 Traces Enrichment



Small but mighty

Concentrated technology for unmatched performance. Designed for routine flash purifications, the technology and unique quality of the pump will take you much further. Even with increased pressure, the puriFlash® XS 520 Plus offers precision, linearity and repeatability and allows you to perform complex and sophisticated purifications.

No matter your level of expertise, Genius will support you to achieve the optimal purification.



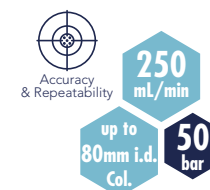
P/N: PFXS50 (220v)
P/N: PFXS51 (110v)



ULTRA HIGH PERFORMANCE PURIFICATION

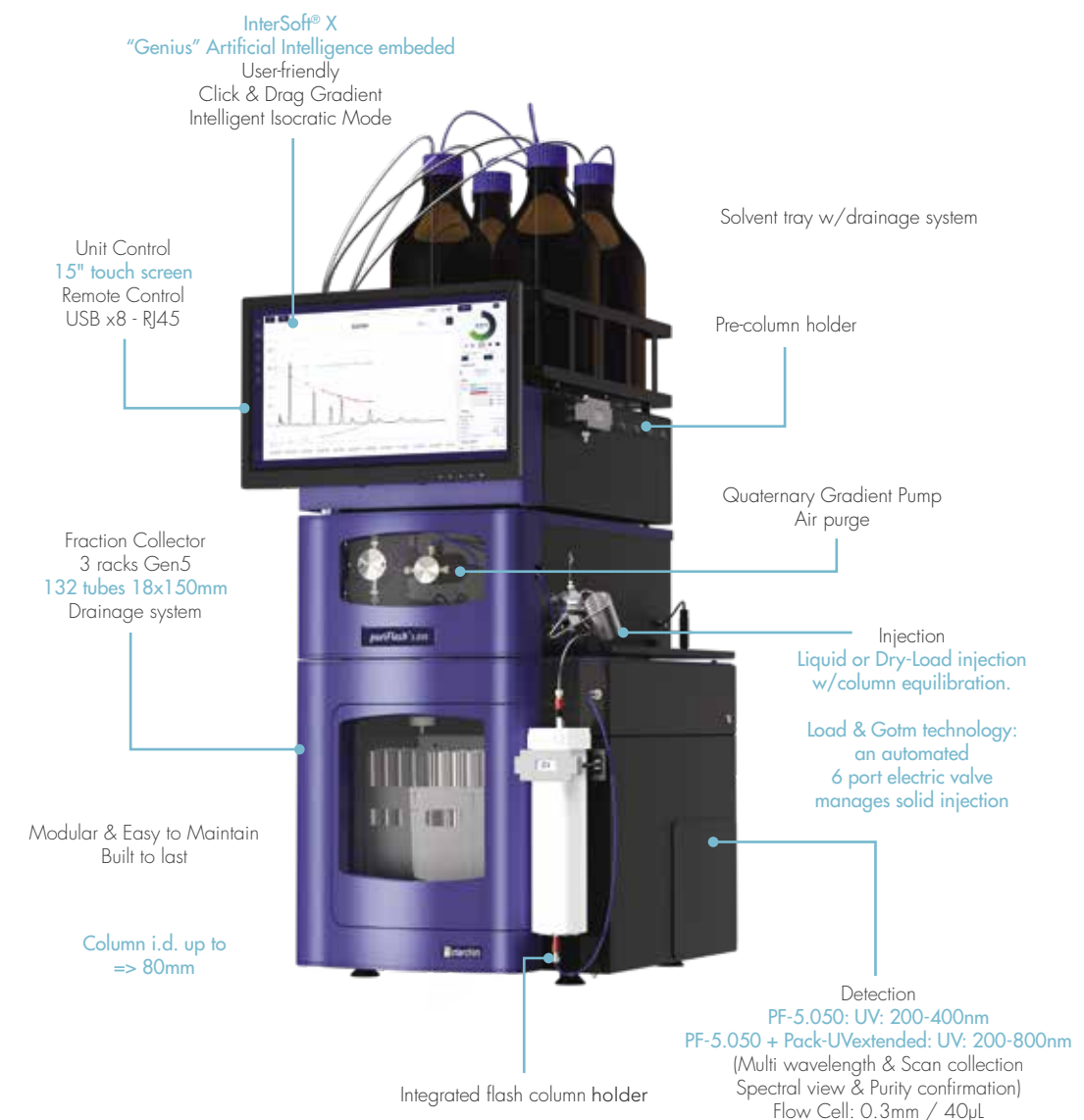
puriFlash® 5.050

Small Organic molecules
 Impurities Identification
 Natural Products
 Peptides, Oligonucleotides
 Proteins, Bio-drugs
 Metabolites Isolation
 Traces Enrichment



Cross-over Flash /Prep

Access preparative chromatography. A single instrument to perform both flash and preparative purifications. Switch from normal to reverse phase and work with reusable columns.



P/N: PFG5C0 (220v)
P/N: PFG5C1 (110v)



ULTRA HIGH PERFORMANCE PURIFICATION

	Flash Purification			Flash Purification	Flash Purification
	XS 520			5.020	5.050
Pump					
Flow rate	300mL/min			300mL/min	250mL/min
Pressure max.	20bar			20bar	50bar
Quaternary Gradient	yes			yes	yes
Air purge	yes			yes	yes
Washing discs	no			no	yes
Pump washing discs (pack)	no			no	no
Detector	*Plus	_UVextended	_Ultra		
UV: 200 - 400nm multi wavelength & scan collection	yes	no	no	yes	yes
UV: 200 - 800nm multi wavelength & scan collection	no	yes	yes	pack-UVextended	pack-UVextended
Spectral view & purity confirmation		yes		yes	yes
iELSD Detection (pack)		no		pack-iELSD	pack-iELSD
pH/Conductimeter		no		no	no
Injection	*Plus	_UVextended	_Ultra		
4 port electrical valve	no	no	yes	yes	no
6 port electrical valve w/loop		no		no	yes
6 port + 10 port electrical valves w/loop		no		no	no
Injection mode: liquid - Dry-Load		yes		yes	yes
Column Selection valve					
14 port /6 position electrical valve		no		no	no
6 port electrical valve		no		no	no
System Optimization					
Tubings - after pump		1/8" x 1.6mm id		1/8" x 1.6mm id	1/8" x 1.6mm id
Flow cell-optical length		0.3mm/40µL		0.3mm/40µL	0.3mm/40µL
Columns Holder					
Integrated		yes		yes	yes
Pre-column holder		no		yes	yes
Fraction Collector					
Regular Collector		2 long racks 112 tubes 18x150mm		3 racks Gen5 132 tubes 18x150mm	3 racks Gen5 132 tubes 18x150mm
Unit control					
Touch screen 15"		yes		yes	yes
USB		4		8	8
RJ45		yes		yes	yes
Software					
Intersoft® X		yes		yes	yes
Safety					
Leak detection (pump, FC, iELSD, holders)		no		yes	yes
Solvent tray w/drainage system		yes		yes	yes
Collector w/drainage system		yes		yes	yes
Solvent level monitoring		no		yes	yes
RFID		no		yes	yes
Fume Encloser		yes		yes	yes
Size					
		W: 14" - 35.5cm D: 18.5" - 47cm H: 30" - 77cm		W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm

ULTRA HIGH PERFORMANCE PURIFICATION

puriFlash® 5.250



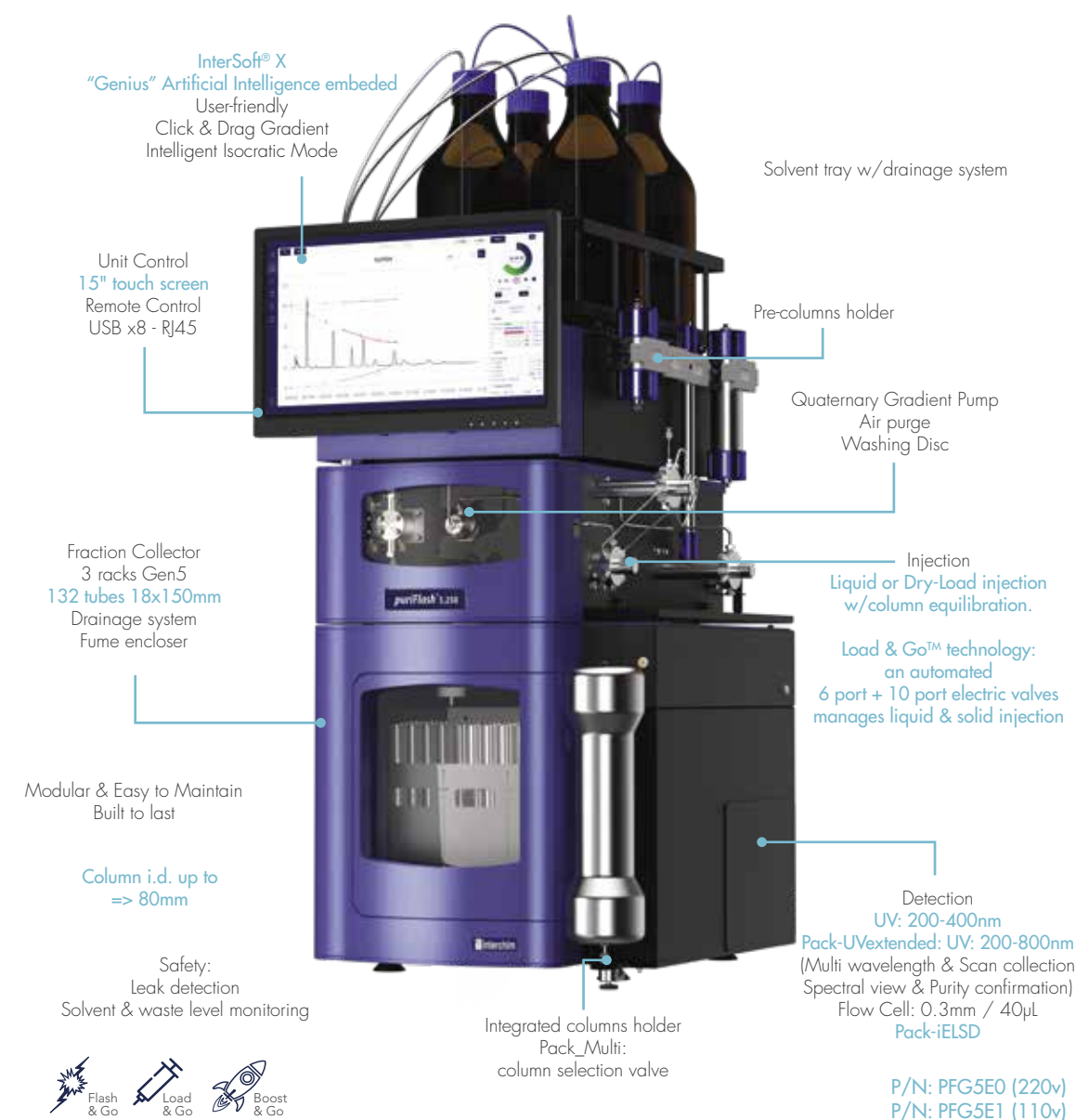
250
mL/min
up to
80mm i.d.
Col.

Small but limitless

Maximum Versatility and Flexibility.

The system brings powerful performance in all circumstances. It adapts to all needs from routine purification to complex mixtures, impurity separation, or trace enrichment. It is continuously ready to start multiple purifications in normal or reverse phase, flash or prep.

Small Organic molecules
Impurities Identification
Natural Products
Peptides, Oligonucleotides
Proteins, Bio-drugs
Metabolites Isolation
Traces Enrichment



ULTRA HIGH PERFORMANCE PURIFICATION

puriFlash® 5.400UV

- Small Organic molecules
- Impurities Identification
- Natural Products
- Peptides, Oligonucleotides
- Proteins, Bio-drugs
- Metabolites Isolation
- Traces Enrichment



Accuracy & Repeatability

125 mL/min

up to **60mm i.d. Col.**

400 bar

The Ultra-Purification

Method development and purification of rare and high added value compounds. From method development to purification on the same instrument, the system offers more flexibility, saving time. It is compatible with a sub-2 micron column for maximum separating power.

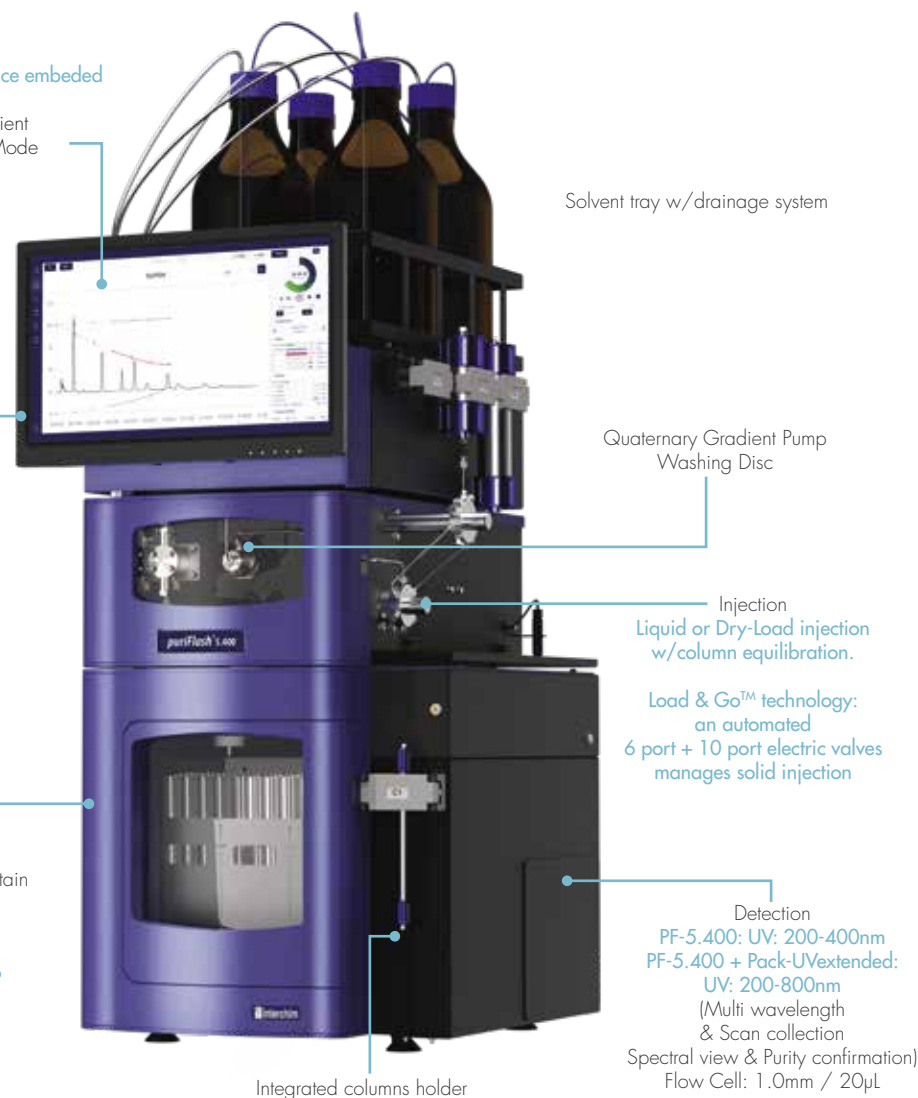
InterSoft® X
"Genius" Artificial Intelligence embedded
User-friendly
Click & Drag Gradient
Intelligent Isocratic Mode

Unit Control
15" touch screen
Remote Control
USB x8 - RJ45

Fraction Collector
3 racks Gen5
132 tubes 18x150mm
Drainage system

Modular & Easy to Maintain
Built to last

Column i.d. up to
=> 60mm



P/N: PFG5F0 (220v)
P/N: PFG5F1 (110v)

ULTRA HIGH PERFORMANCE PURIFICATION

	Preparative 5.250	Ultra-Prep 5.400
Pump		
Flow rate	250mL/min	125mL/min
Pressure max.	250bar	400bar
Quaternary Gradient	yes	yes
Air purge	yes	no
Washing discs	yes	yes
Pump washing discs (pack)	pack-PWD	pack-PWD
Detector		
UV: 200 - 400nm multi wavelength & scan collection	yes	yes
UV: 200 - 800nm multi wavelength & scan collection	pack-UVextended	pack-UVextended
Spectral view & purity confirmation	yes	yes
iELSD Detection (pack)	pack-iELSD	
pH/Conductimeter	no	no
Injection		
4 port electrical valve	no	no
6 port electrical valve w/loop	no	no
6 port + 10 port electrical valves w/loop	yes	yes (1/16" & 0.75mm)
Injection mode: liquid - Dry-Load	yes	no
Column Selection valve		
14 port /6 position electrical valve	no	no
6 port electrical valve	pack-Multi	no
System Optimization		
Tubings - after pump	1/8" x 1.6mm id	55 - 1/16" x 0.50mm id
Flow cell-optical length	0.3mm/40µL	1.0mm/20µL
Columns Holder		
Integrated	yes	yes
Pre-column holder	yes	no
Fraction Collector		
Regular Collector	3 racks Gen5 132 tubes 18x150mm	3 racks Gen5 132 tubes 18x150mm
Unit control		
Touch screen 15"	yes	yes
USB	8	8
RJ45	yes	yes
Software		
InterSoft® X	yes	yes
Safety		
Leak detection (pump, FC, iELSD, holders)	yes	yes
Solvent tray w/drainage system	yes	yes
Collector w/drainage sytem	yes	yes
Solvent level monitoring	yes	yes
RFID	yes	yes
Fume Encloser	yes	yes
Size		
	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm



PURIFLASH® MS & MS SPLITTER

Mass triggered fraction collection for NP & RP Flash Purification & prep-LC

Mass spectrometry allows simultaneous purification and compound characterization with mass-directed fraction collection

The puriFlash®-CMS offers the benefits of compact mass spectrometry (CMS) for in-line, mass-directed fraction collection, providing users a more sensitive and accurate measure of fractions in real-time and a reliable detection method even when the analyte lacks a chromophore.

The technology unambiguously identifies residual starting materials, desired product ions, side reactants and impurities by their molecular weight even in the presence of co-eluting compounds and solvent peaks. Offering both APCI or ESI ionization with positive and negative polarity, the addition of a mass spectrometer should be something every chemist should consider for the ultimate purification solution.

Mass directed fraction collection greatly speeds up the chemist's workflow with confidence in the content and purity of the collected fractions by eliminating off-line TLCs, workup, and core lab LC/MS assays.

- Unique MS-interface design with a dynamic split and dilution valve for high flow rates and all column sizes without generating backpressure
- Integrated post-split dilution to adjust the concentrations used in the MS source (no concentration limit – no signal saturation)
- Normal & Reverse Phase
- Normalized Scale signals MS, UV, ELSD (6 acquisition signals)



Compact Single Quad - APCI
Real-time reaction monitoring of batch reactions.
The hood-based puriFlash MS reduces the burden on open-access platforms.

puriFlash® MS (1200 m/z): 1H5460
puriFlash® MS (2000 m/z): 1G6770

	puriFlash® MS for small molecules, synthetic organic chemists. Upgraded specs for pos/neg switching, faster scanning & higher flow rate	puriFlash® MS-HMW for large molecules - peptide synthesis, polymer chemistry & natural products
Sources	APCI - (ESI option)	APCI or ESI
Patented API	Orthogonal ion sampling from heated capillary allows for small single turbo pump.	Orthogonal ion sampling from heated capillary allows for small single turbo pump.
Positive/Negative Ionization	Simultaneous analysis	Simultaneous analysis
Flow rate range ESI	10µL/min - 1mL/min	10µL/min - 1mL/min
Flow rate range APCI	10µL/min - 2mL/min	10µL/min - 2mL/min
Mass range (m/z)	10 to 1 200	10 to 2 000
Scan rate (m/z-units per second)	10 000	10 000
Resolution (m/z-units FWHM)	0.5 - 0.7	0.5 - 0.7
Sensitivity (SIM - S/N de 10pg Reserpine, FIA 5µL injection at 100µL/min)	100:1	100:1
Accuracy (m/z)	0.1	0.1
Stability (m/z-units per 24 hour period: 18 - 24°C)	0.1	0.1

THE EXPRESSION CMS FAMILY OF COMPACT MASS SPECTROMETERS

expression
CMS

The family of expression® CMS was developed with maximum versatility in mind allowing users to switch rapidly between various sample introduction techniques with little sample preparation. The affordability, small size, and ease of use make them ideal for a variety of applications including reaction monitoring, teaching, cannabis/hemp, food/ingredients, environmental and more.

Most laboratories require the ability to analyze a range of samples using more than one technique for more complete identification and characterization of samples. The expression® CMS integrates with nearly every chemistry technique from the simplest, fastest direct probe analysis requiring no sample preparation to ultra-high performance compound separation with LC integration. The expression® CMS offers the most versatile sample techniques on the market.



PLATE EXPRESS: DIRECT MASS ANALYSIS FROM TLC PLATES IN <30S



Plate Express

Thin-layer chromatography (TLC) is a routine, reliable method used in most chemistry laboratories, but traditional visualization techniques give no structural information on the TLC spots. Mass Spectrometry is a powerful technique for identifying spots, but traditional, manual steps involving scraping spots from the plate, extraction in suitable solvents and finally reconstitution in solvent appropriate for injection into the mass spectrometer (MS), make obtaining spectra difficult and time consuming. The Plate Express is a device that provides a simple, automated means of obtaining mass spectra directly from TLC plates.

With the Plate Express you can:

- Identify spots in <1 minute
- Avoid the risk of overloading the mass spectrometer
- TLC spots contain the ideal amount of sample for mass spectrometry
- Simplify the process of obtaining spectra
- Ideal for multi-user labs
- Software controlled - spectra obtained within a few mouse clicks
- No scraping TLC spots

UNRIVALED UTILITY AND FLEXIBILITY FOR A WIDE RANGE OF APPLICATIONS

expression
CMS
APPLICATIONS



Reaction Monitoring

With the CMS, users can monitor progress and side reactions, and can quickly determine the optimal time to quench a reaction mixture.

Teaching Chemistry

The system is available with a teaching package with curriculum including video lectures and PowerPoint slides, offering professors the ability to easily provide students with industry-related knowledge and experience.

Cannabis & Hemp

Easy cannabinoid analysis, ideal for characterization, potency testing, screening for contaminants such as pesticides, and determination of optimal harvest time.

Food Safety and Ingredients Analysis

The CMS provides characterization, screening and purity determination.

Environmental Analysis

The perfect environmental testing companion, the CMS offers fast, direct screening and can be deployed in a field setting for immediate, on-site answers.

Clinical Diagnostics

The CMS with the AVANT (U)HPLC is optimized for clinical LC/MS assays such as Vitamin D2/D3 analysis or can be used standalone with a variety of prep-free screening techniques.

Proteins and Peptides

The expression[®] CMS extended range mass spectrometer is ideal for large molecule synthesis analysis including proteins, peptides, and oligonucleotides



ASAP, OPSI & VAPCI PREP-FREE SAMPLE INTRODUCTION TECHNIQUES



ASAP Atmospheric Solids Analysis Probe

The direct atmospheric solids analysis probe, otherwise known as ASAP, permits chemists fast and reliable sample analysis of liquid and solid samples such as reaction mixtures, food samples, natural products and tablets.

The ASAP probe offers:

- No sample preparation
- No chromatography
- Fast and affordable sample analysis
- Solvent-free APCI
- Green practices without the need to buy and dispose of solvent
- Ionizes a wider range of compounds

iASAP Inert ASAP Probe

The inert ASAP (iASAP) is a modification of the ASAP technique, allowing easy sampling of air-sensitive compounds, such as metal catalysts and organometallics, from reactions that are carried out in a glove box or Schlenk line to prevent oxidation.

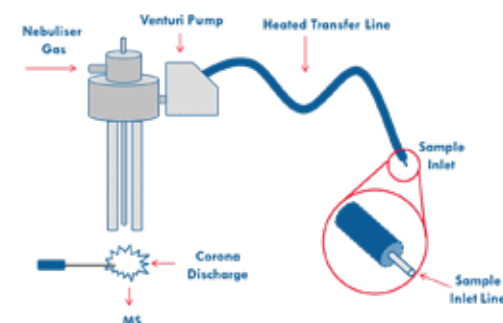


OPSI Open Port Sampling Interface

The Touch Express Open Port Sampling Interface (OPSI), is designed for simple sampling of solids, liquids and sample preparation tips and fibers. Any soluble sample touching the port is analyzed by the mass spectrometer in mere seconds.

The OPSI source is a unique, prep-free sample technique that offers:

- Compound ID and impurity detection from almost any surface
- Direct assays from sample preparation tips and SPME fibers
- Easy screening applications for drug research, food safety, environmental, forensics
- Large molecule applications including proteins, peptides, oligonucleotides and polymers



vAPCI Volatile APCI Source

vAPCI combined with the expression[®] CMS is a fast and easy method to quickly and confidently analyze compounds in air, breath, headspace and other gas samples without the need for additional sample preparation. vAPCI provides a sample inlet linked by a heated transfer line to the APCI ion source of the CMS, where the sample is ionized by chemical reaction by a corona discharge.

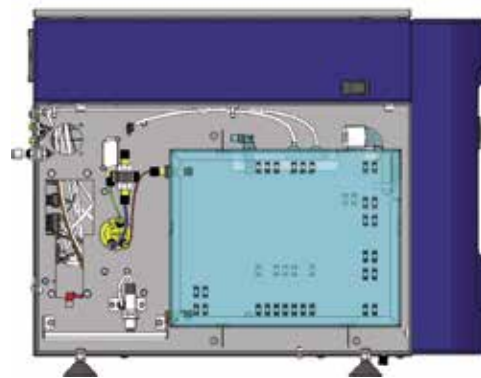
vAPCI enables chemists to:

- Analyze samples directly in the gas phase
- Solvent-free APCI allows a greater range of compounds to be ionized compared to traditional APCI ion sources.

PREPARATIVE INTEGRATED ELSD

Secure your purification by a Universal Detector

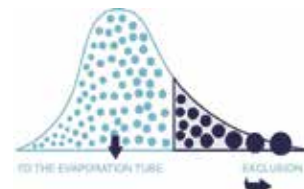
- Even non chromophore are now visible
- Specifically developed for purification mass response detector
- Full control of the split and the inlet flow
- True purification design nebulizer: no clogging
- Large dynamic range: mg up to hundred g
- Easy access /easy maintenance



Optimized Low Temperature Technology
Quicker droplets drying at lower temperature
Preserves the integrity of thermo-sensitive compounds

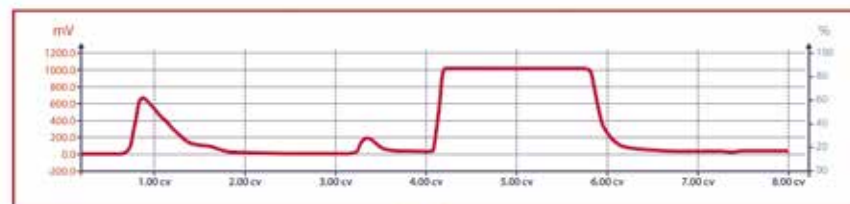
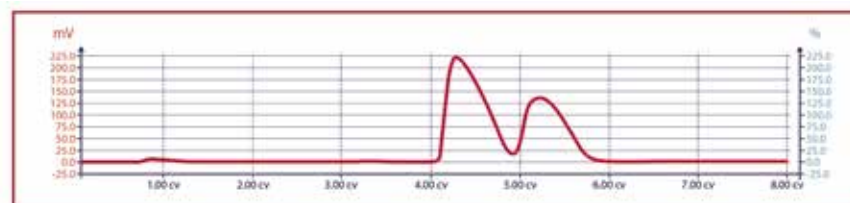
Low Temperature Technology:

This technology provides greater sensitivity with both the nebulizer that enables droplet selection and an effective photomultiplier. With this patented nebulizer technology, the droplets dry faster at low temperatures, providing appropriate signal intensities for semi-volatile compounds. This technology requires no additional peripherals, such as a nebulizer with heating system (spray chamber) or an evaporation tube (Peltier cooling) that can degrade the heat-sensitive compounds.

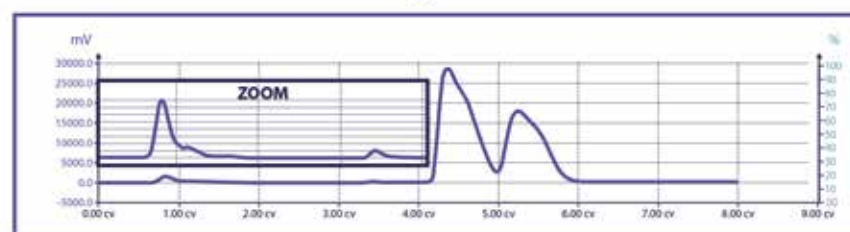


Dynamic Gain SAGA:

SAGA adapts the gain to avoid saturation while continuing to detect small quantities of products. ELSD becomes unsaturable without impact on sensitivity.



Now, with Interchim SAGA



- Detection: high sensitivity photodiode
- Source: LED (470nm)
- Ambient temperature to 100°C
- Dynamic Split: 40µL / min sample in DEDL
- Gas: 1-1.5L/min - 1 bar

PURIVAP-6™ / EVAPORATOR

puriVap-6™



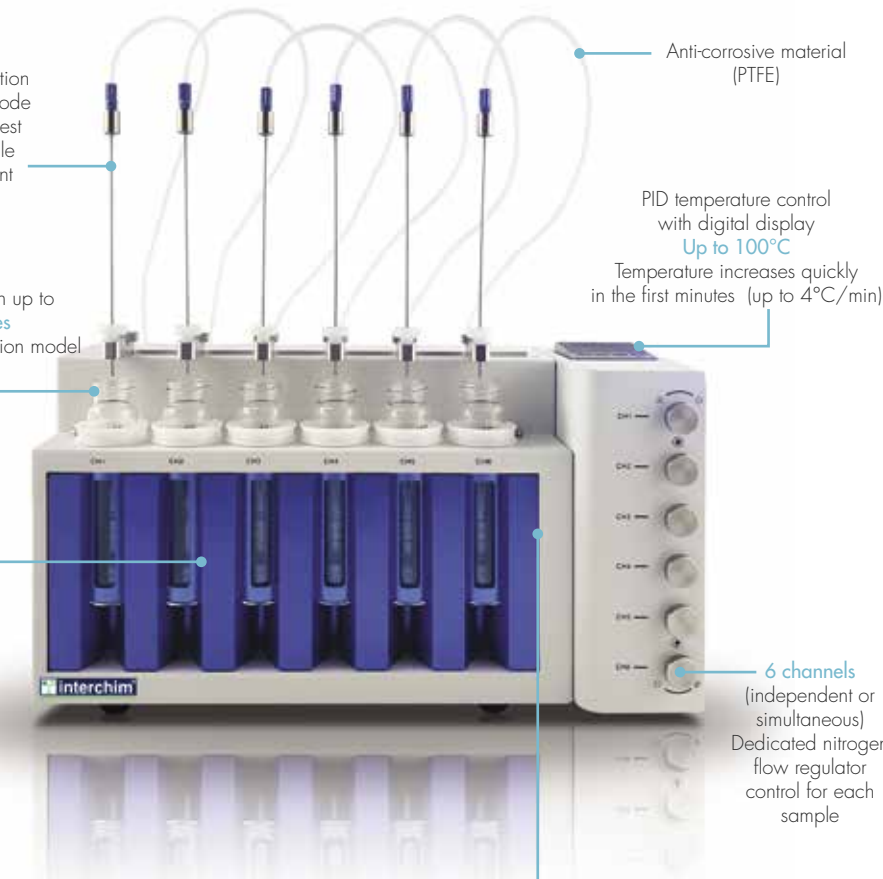
Simple & Smart - 6 positions

- 6 channels to run up to 6 samples (independent or simultaneous)
- Sample volumes from 2mL up to 60mL
- PID temperature control with digital display up to 100°C
- Temperature increases quickly in the first minutes (up to 4°C/min)
- Dedicated nitrogen flow regulator control for each sample
- Nitrogen blow in combination of heating concentration mode
- Ability to select the best nitrogen needle position to ensure efficient evaporation
- Anti-corrosive material (PTFE)
- "Open view" to control sample volume level during the evaporation process
- Dry aluminium block heating mode to avoid potential water vapor interference
- Small difference temperature between channels (RSD: 0.11%)
- Low gas consumption (nitrogen gas supply: 1-2bar max | flow rate: 7-8L/min)

Nitrogen blow in combination of heating concentration mode
Possibility to choose the best position of nitrogen needle to ensure the most efficient evaporation

Possibility to run up to 6 samples
Parallel concentration model

Dry aluminium block heating mode to avoid potential water vapor interference
Small temperature difference between channels (RSD: 0.11%)



Anti-corrosive material (PTFE)

PID temperature control with digital display
Up to 100°C
Temperature increases quickly in the first minutes (up to 4°C/min)

6 channels (independent or simultaneous)
Dedicated nitrogen flow regulator control for each sample

"Open view" to control sample volume level during the evaporation process



PROCESS PURIFICATION

puriFlash® 535-XL

- Small Organic molecules
- Impurities Identification
- Natural Products
- Peptides, Oligonucleotides
- Proteins, Bio-drugs
- Metabolites Isolation
- Traces Enrichment



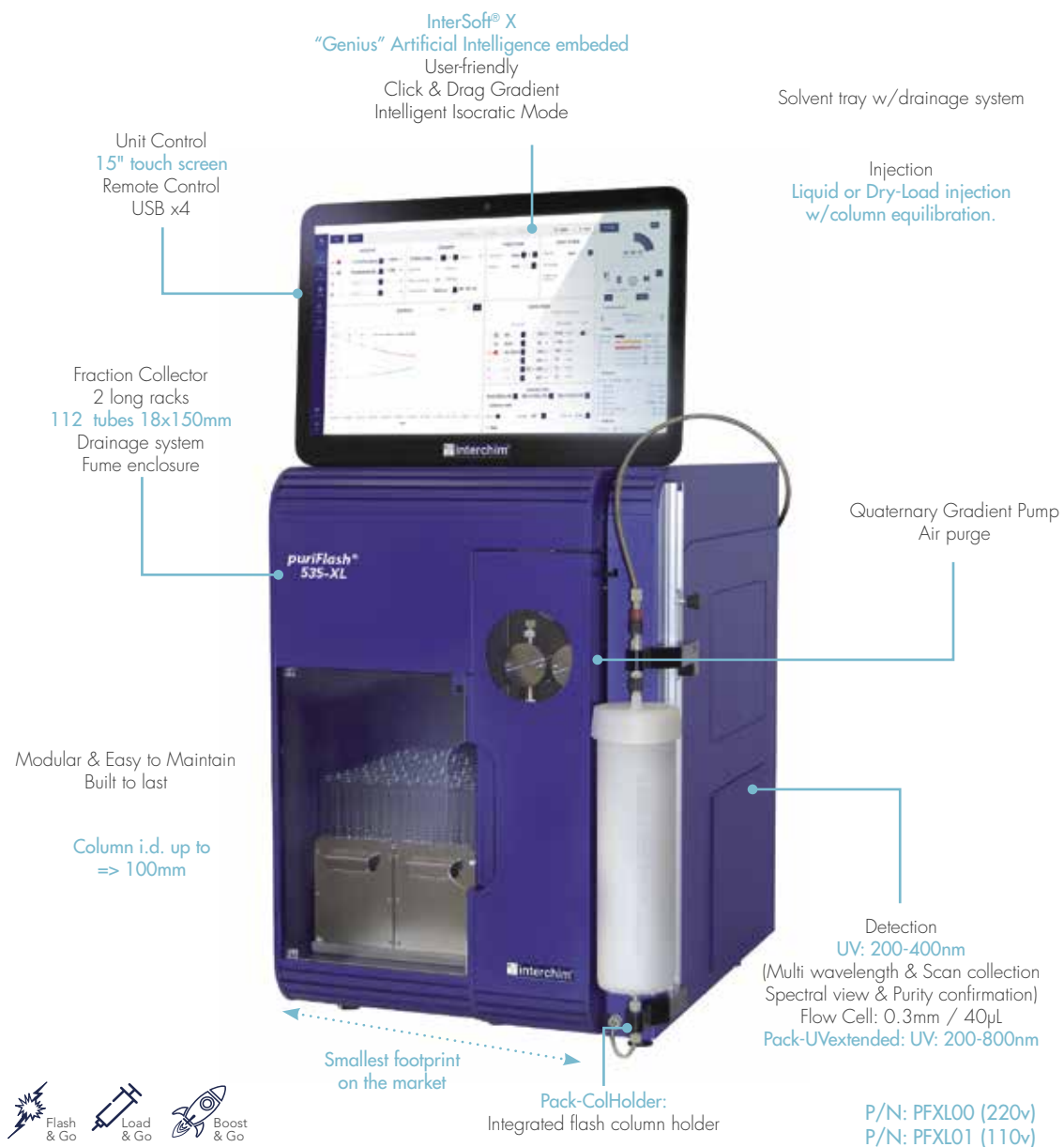
400 mL/min

up to 1600G

35 bar

Process - Kilo-Lab

Reliability and robustness with significant loading capacity. Reliable, robust, and secure - the 535-XL offers the essentials for semi-continuous production for effective purification up to hundreds of grams of your compound of interest. Continuity of production on the same device independent of the scale-up factor.



PROCESS PURIFICATION

puriFlash® 5.015-XL

- Small Organic molecules
- Impurities Identification
- Natural Products
- Peptides, Oligonucleotides
- Proteins, Bio-drugs
- Metabolites Isolation
- Traces Enrichment



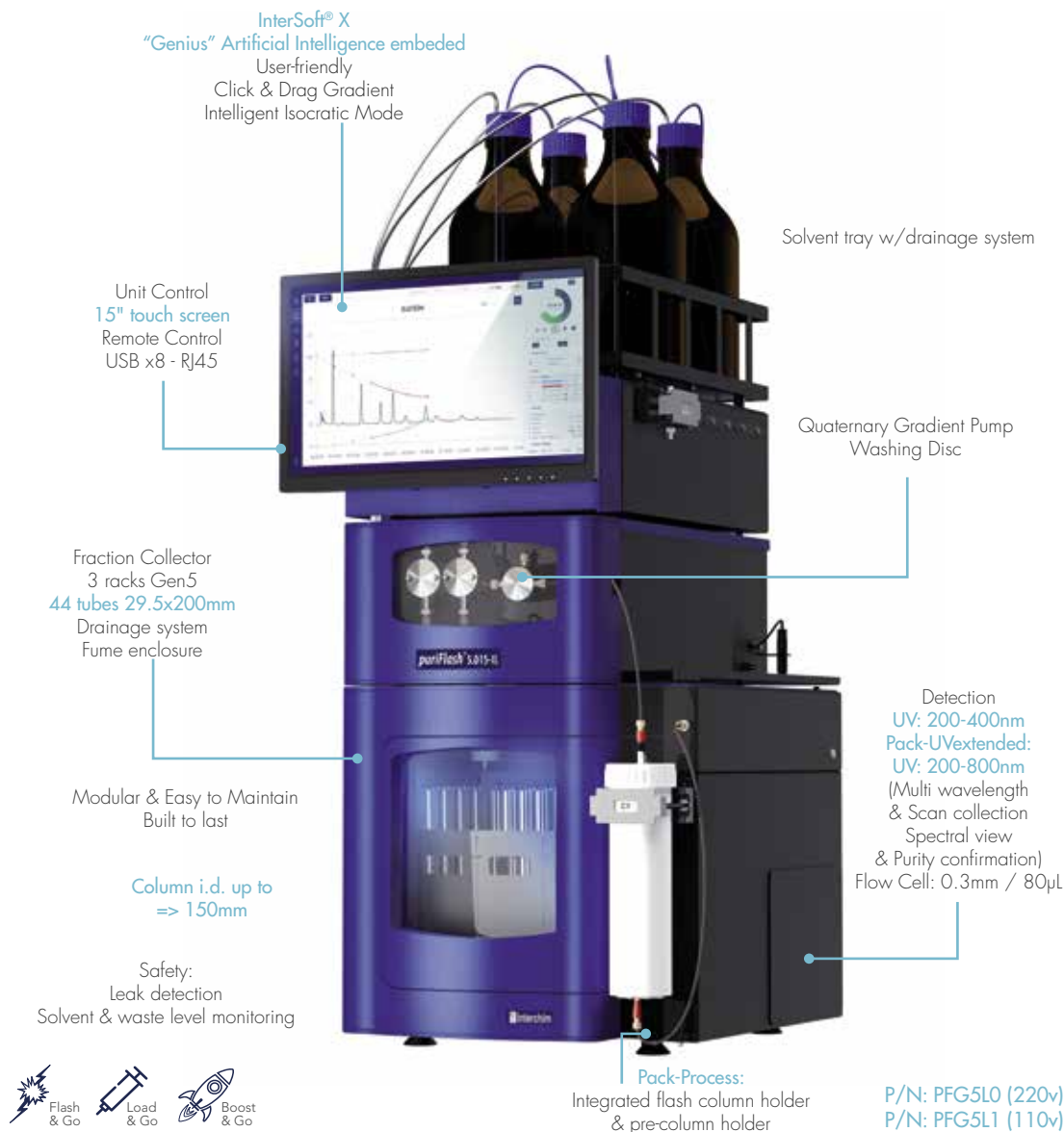
825 mL/min

up to 150mm i.d. Col.

15 bar

Process - Kilo-Lab

Reliability & robustness with significant loading capacity. Reliable, robust, and secure - the 5.015-XL offers the essentials for semi-continuous production for effective purification up to Kgs of your compound of interest. Continuity of production on the same device independent of the scale-up factor.



PROCESS PURIFICATION

	Flash Purification Process 535-XL	Flash Purification Process 5.015-XL
Pump		
Flow rate	400mL/min	825mL/min
Pressure max.	35bar	15bar
Quaternary Gradient	yes	yes
Air purge	yes	no
Washing discs	no	yes
Pump washing discs (pack)	no	no
Detector		
UV: 200 - 400nm multi wavelength & scan collection	yes	yes
UV: 200 - 800nm multi wavelength & scan collection	pack-UVextended	pack-UVextended
Spectral view & purity confirmation	yes	yes
iELSD Detection (pack)	no	no
pH/Conductimeter	no	no
Injection		
4 port electrical valve	no	no
6 port electrical valve w/loop	no	no
6 port + 10 port electrical valves w/loop	no	no
Injection mode: liquid - Dry-Load	yes	yes
Column Selection valve		
14 port /6 position electrical valve	no	no
6 port electrical valve	no	no
System Optimization		
Tubings - after pump	1/8" x 1.6mm id	1/8" x 2.4mm id
Flow cell-optical length	0.3mm/40µL	0.3mm/80µL
Columns Holder		
Integrated	pack-ColHolder	pack-Process
Pre-column holder	no	pack-Process
Fraction Collector		
Regular Collector	2 long racks 112 tubes 18x150mm	3 racks Gen5 42 tubes 29.5x200mm
Unit control		
Touch screen 15"	yes	yes
USB	4	8
RJ45	yes	yes
Software		
Intersoft® X	yes	yes
Safety		
Leak detection (pump, FC, iELSD, holders)	no	yes (except holders)
Solvent tray w/drainage system	yes	yes
Collector w/drainage sytem	yes	yes
Solvent level monitoring	no	yes
RFID	no	yes
Fume Encloser	yes	yes
Size		
	W: 14" - 35.5cm D: 18.5" - 47cm H: 30" - 77cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm



PEPTIDES PURIFICATION

puriFlash® 5.250P

- Small Organic molecules
- Impurities Identification
- Natural Products
- Peptides, Oligonucleotides
- Proteins, Bio-drugs
- Metabolites Isolation
- Traces Enrichment

Accuracy & Repeatability

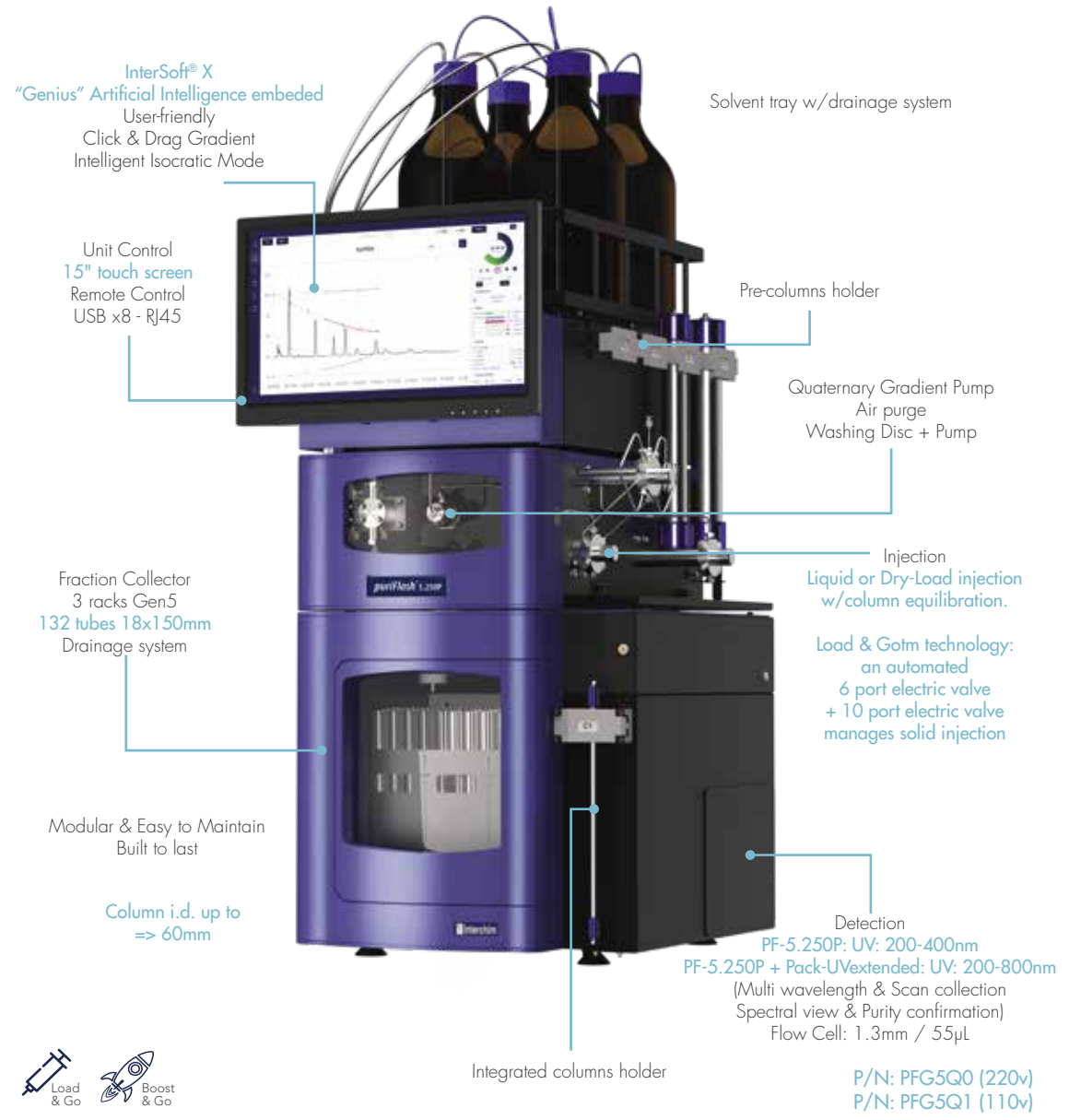
125 ml/min

up to 60mm i.d. Col.

250 bar

Purification of complex mixtures of peptides

Maximum efficiency. The use of small particle size combined with the reduction of dead volume makes it possible to discriminate nearby peptides in terms of amino acid sequence.



PROTEINS PURIFICATION

puriFlash® UP³ Coming soon

- Small Organic molecules
- Impurities Identification
- Natural Products
- Peptides, Oligonucleotides
- Proteins, Bio-drugs
- Metabolites Isolation
- Traces Enrichment

Accuracy & Repeatability

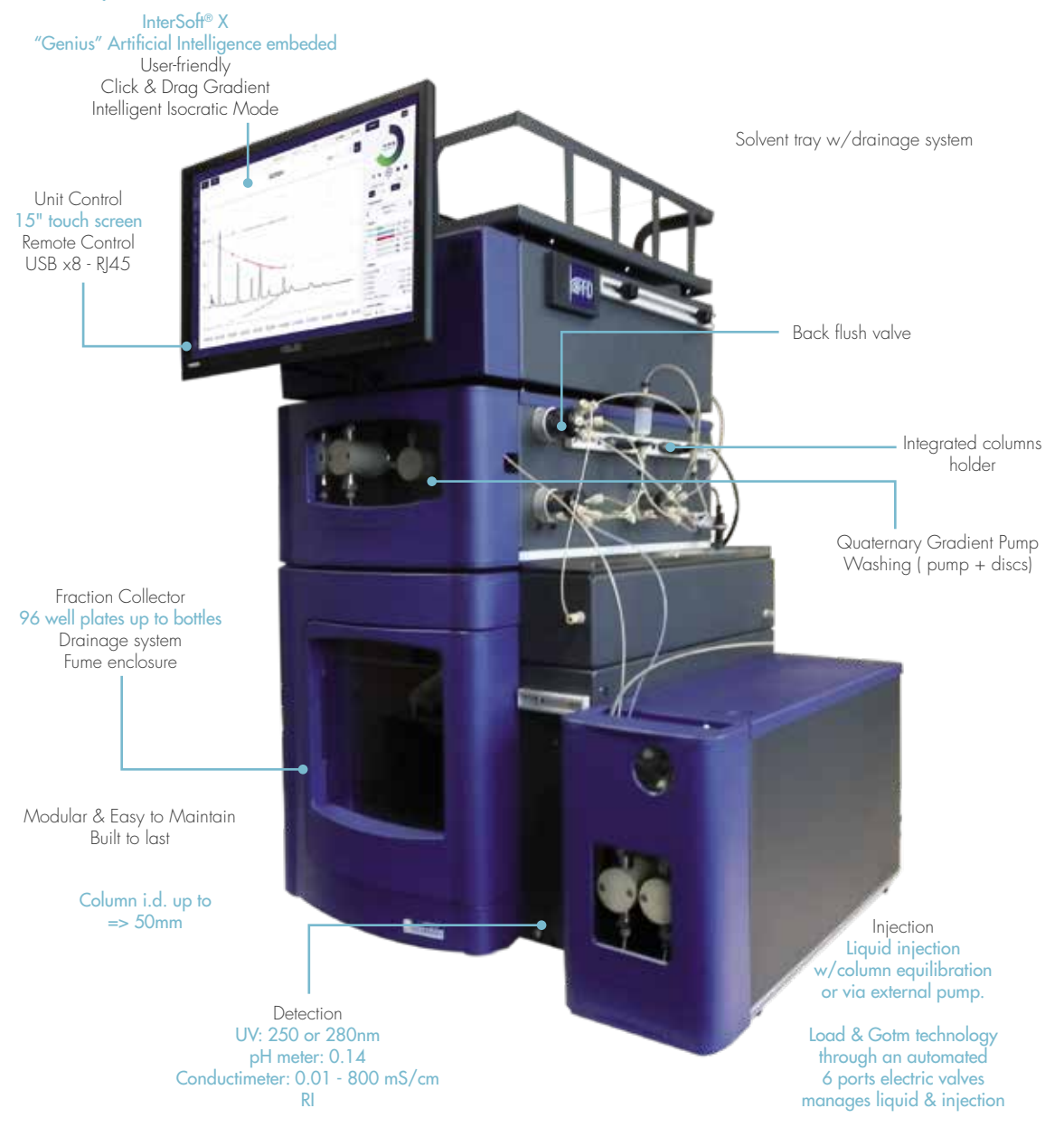
100 ml/min

up to 50mm i.d. Col.

50 bar

UP³ - Ultra Performance Proteins Purification

The new horizon in method development and purification of proteins. A single user-friendly instrument that provides more capabilities and flexibility, saving time. Compatible with 100% of existing SEC, IEX, affinity low and medium pressure bio-columns.

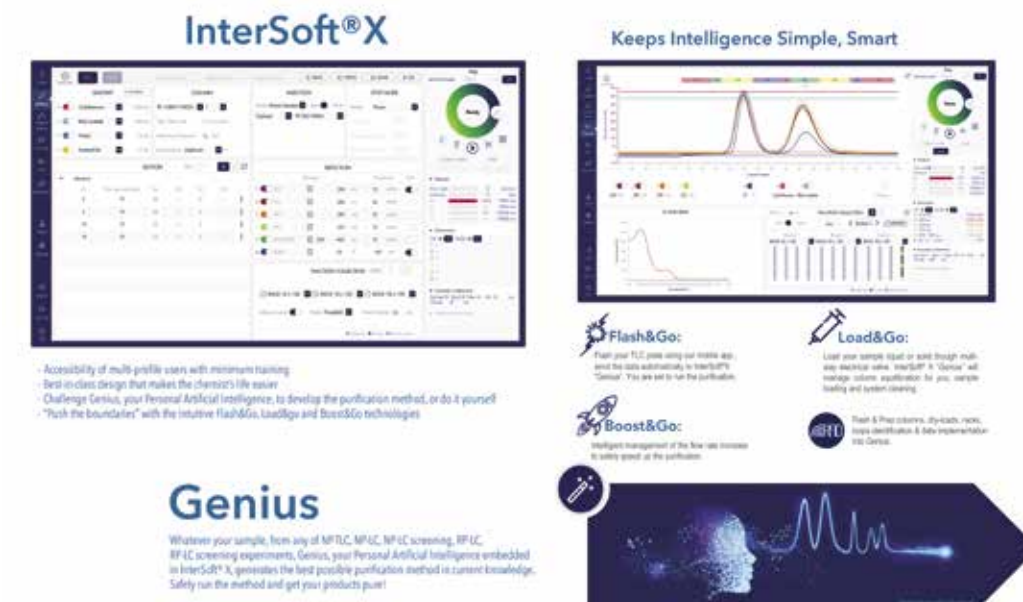


PEPTIDES PURIFICATION

	Peptides & Oligonucleotides PF-5.250P	Proteins Purification UP ³
Pump		
Flow rate	125mL/min	100mL/min
Pressure max.	250bar	50bar
Quaternary Gradient	yes	yes
Air purge	yes	no
Washing discs	yes	yes
Pump washing discs (pack)	yes	yes
Detector		
UV: 200 - 400nm multi wavelength & scan collection	yes	254nm & 280nm 200-to-400nm as an option*
UV: 200 - 800nm multi wavelength & scan collection	pack-UVextended	no
Spectral view & purity confirmation	yes	*pack-UV
iELSD Detection (pack)		no
pH/Conductimeter	no	yes
Injection		
4 port electrical valve	no	no
6 port electrical valve w/loop	no	yes
6 port + 10 port electrical valves w/loop	yes	no
Injection mode: liquid - Dry-Load	yes	no
Column Selection valve		
14 port /6 position electrical valve	no	no
6 port electrical valve	pack-Multi	no
System Optimization		
Tubings - after pump	peek 1/16" x 0.75mm id	n.c.
Flow cell-optical length	1.3mm/55µL	n.c.
Columns Holder		
Integrated	yes	yes
Pre-column holder	yes	no
Fraction Collector		
Regular Collector	3 racks Gen5 132 tubes 18x150mm	3 racks Gen5 132 tubes 18x150mm
Unit control		
Touch screen 15"	yes	yes
USB	8	8
RJ45	yes	yes
Software		
InterSoft® X	yes	yes
Safety		
Leak detection (pump, FC, iELSD, holders)	yes	yes
Solvent tray w/drainage system	yes	yes
Collector w/drainage system	yes	yes
Solvent level monitoring	yes	yes
RFID	yes	yes
Fume Encloser	yes	yes
Size		
	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm

SOFTWARE

InterSoft® X



InterSoft® X
Keeps Intelligence Simple, Smart

Flash&Go: Flash your TLC plate using our mobile app., send the data automatically to InterSoft® X "Genius". You are set to run the purification.

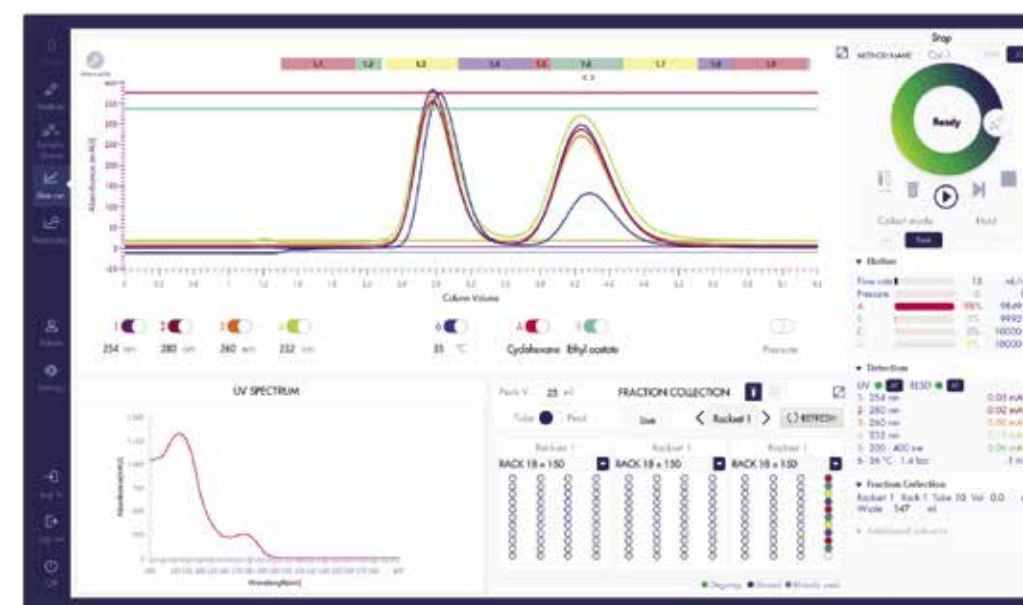
Load&Go: Load your sample liquid or solid through multi-way electrical valve. InterSoft® X "Genius" will manage column equilibration for you, sample loading and system cleaning.

Boost&Go: Intelligent management of the flow rate increase to safely speed up the purification.

RFID: Flash & Prep columns, dry-loads, racks, loops identification & data implementation into Genius.

Genius
Whatever your sample, from any of NP/IC, NP/IC screening, NP/IC, NP/IC screening experiments, Genius, your Personal Artificial Intelligence embedded in InterSoft® X, generates the best possible purification method in current knowledge. Safely run the method and get your products pure!

- Accessibility of multi-profile users with minimum training
- Best-in-class design that makes the chemist's life easier.
- Challenge Genius, your Personal Artificial Intelligence, to develop the purification method, or do it yourself
- "Push the boundaries" with the intuitive Flash&Go, Load&go and Boost&Go technologies



Flash your TLC plate using our mobile app., send the data automatically to InterSoft® X "Genius". You are set to run the purification.



Intelligent management of the flow rate increase to safely speed up the purification.



Load your sample liquid or solid through multi-way electrical valve. InterSoft® X "Genius" will manage column equilibration for you, sample manage column equilibration for you, sample loading and system cleaning.



Flash & Prep columns, dry-loads, racks, loops identification & data implementation into Genius.



"TLC to Flash & Prep Chromatography"

Revolutionize your TLC using our App

Augmented reality to greatly improve your daily routine.

As experts in purification, we aim to offer maximum comfort with the highest efficiency in your laboratory. Thanks to the app that we have developed, we can share your future vision by constantly providing new technology solutions. Using your mobile phone or tablet, method development is now in your pocket, with just a few clicks to expert-level purification.

A unique technology that slides through your fingers with one single click.

Our goal is to support you and to save you time day by day. The TLC to Flash & Prep app allows for:

- Automatic detection of your compounds and calculation of your Rf and $\Delta CV (= \Delta K)$ values
- Direct (and secure) information transfer to puriFlash® and the "Genius" software, which suggests the best method for a successful purification
- Data archiving, if desired.



Flash & Go: "New TLC"

The application is extremely intuitively and user-friendly:



Take a picture of the TLC with your smartphone or download it from your library.



Your compounds will be detected automatically. Select the ones of interest with a tap.



The application calculates Rf and $\Delta CV (= \Delta K)$. It indicates if the Rf are placed in the comfort zone to carry out your purification.



From the smallest ΔCV obtained on your TLC plate, the application gives you the level of difficulty of the separation.



Indicate the solvents, their proportions and your comments in the dedicated areas.



Save your TLC plate information. Send them to the email address of your choice or directly to your puriFlash® by bluetooth or wifi: the "Genius" software will recommend the best method for a successful purification.



"MY TLC" for the retention of data

All information of your previous TLC plates are archived in a single location. In case you would like to reuse the parameters of the plate for a new separation, simply send them to any puriFlash® with a single click.



"SETTINGS" to personalize your experience

Connect your smartphone and Tablet with your puriFlash® via bluetooth or Wifi. Configure your application according to your preferences. Quickly and directly access our internet sites.

Need a tablet or smartphone to benefit from our application in your laboratory?

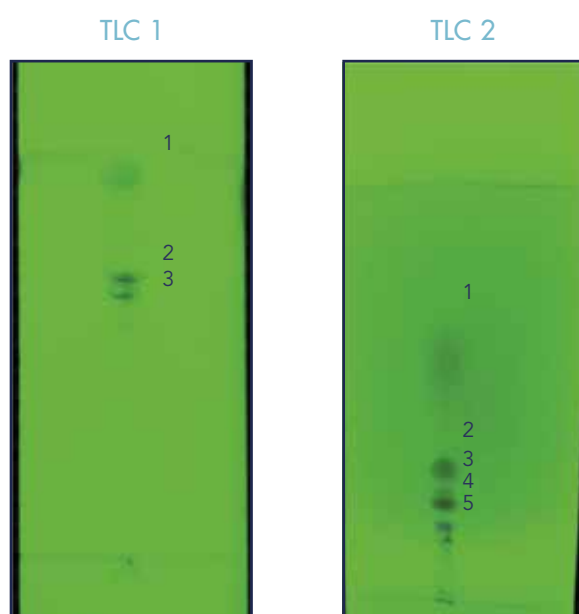
Nothing more simple: Select your choice from the accessories offered for all our purification systems.



"TLC to Flash & Prep Chromatography" is a free application. Our wish was to enable everybody to use it freely. You can even use it if you do not possess a puriFlash® purification system. Nevertheless, your experience as an user may be reduced since our systems are equipped with a unique technology that allows for data exchange only within these systems. Therefore you cannot equally benefit from the "Genius" proposals with regard to the best methods for your purification.

Whatever your sample, from any of NP-TLC, NP-LC, NP-IC screening, RP-LC, RP-IC screening experiments, Genius, your personal Artificial Intelligence embedded in InterSoft® X, generates the best possible purification method in current knowledge. Safely run the method and get your products pure!

1. TLC method development



Mobile phase:
87% DCM / MeOH 13%

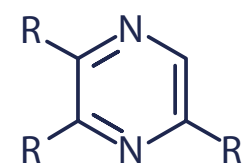
Mobile phase:
90% Toluene / MeOH 10%

Compound	Rf	CV
1	0.95	1.05
2	0.68	1.47
3	0.64	1.56

$\Delta CV_{3,2} = 0.09$

Compound	Rf	CV
1	0.57	1.75
2	0.31	3.23
3	0.25	4
4	0.18	5.56
5	0.14	7.14

Rf of compounds 2 and 3 are close, the separation will not be optimal on Flash column.
Genius provides new TLC conditions (TLC 2) in order to increase ΔRf & ΔCV .



2. Genius proposal

Among the columns proposed by Genius, we have selected a PF-15SIHP-F0012, which was available in stock:

TLC to Flash & Prep (Normal Phase)

Crude sample 100 mg

Solvent 1 Toluene 90 % Additive

Solvent 2 Methanol 10 % Additive

Select your compound(s) of interest

Rf 0.57

Rf 0.31

Rf 0.25

Rf 0.18

Rf 0.14

SELECT A COLUMN

Column	Stock
PF-30SIHP-F0012	<input type="checkbox"/>
PF-15SIHP-F0012	<input checked="" type="checkbox"/>
PF-30SIHP-F0025	<input type="checkbox"/>
PF-30SIHP-F0040	<input type="checkbox"/>
PF-30SIHP-F0080	<input type="checkbox"/>
PF-30SIHP-F0120	<input type="checkbox"/>

Top 3 columns

INJECTION MODE

The crude is fully soluble in the below conditions:
Toluene 98.9%
Methanol 1.1%

Yes No

Liquid _____ mL (max 1.66 mL)

Dry load PF-DLE-F0004

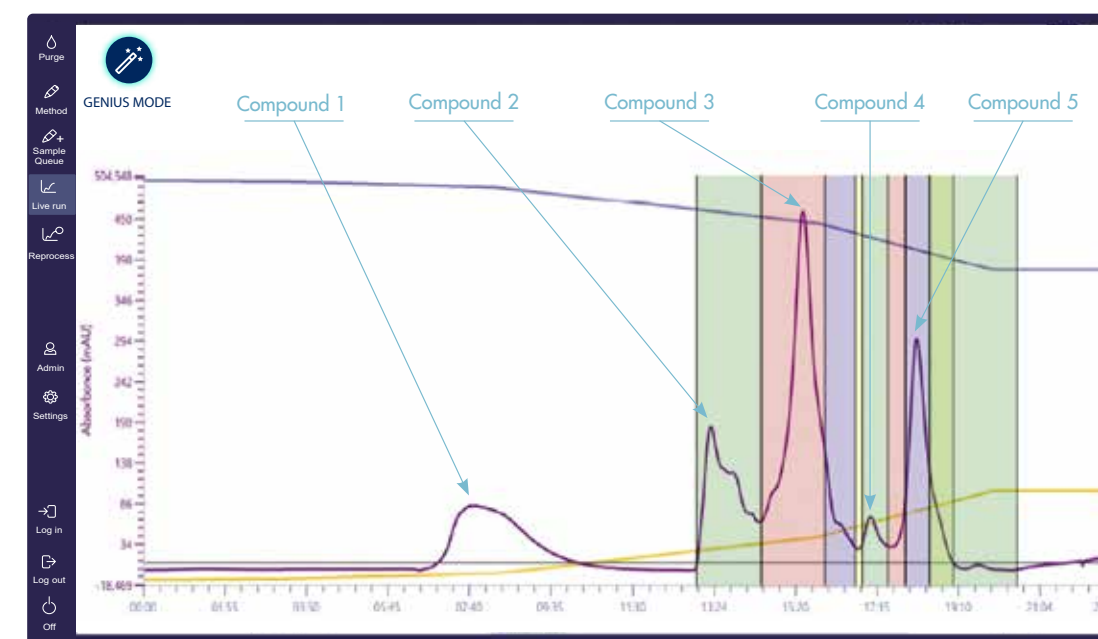
3. Flash conditions

Device: puriFlash® 5.020
Solvents: A: Toluene
B: Methanol
Column: PF-15SIHP-F0012
Flow rate: 15mL/min
Injection mode: Solid deposit with celite
(Dry-load F0004)
Crude sample: 100mg
Detection: UV 265nm
Pressure: 4bar
Elution conditions:

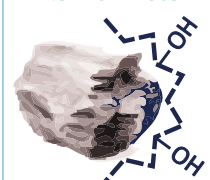
t (min)	A (%)	B (%)
00:00	98.9	1.1
03:27	98.6	1.4
08:17	97.3	2.7
15:52	88.4	11.6
20:00	77	23
26:13	77	23



puriFlash® 5.250
250mL/min - 250bar
Optimized for your preparative purifications



Normal Phase



puriFlash® IR-SI

60Å - 450m²/g
20 & 40/63µm
pH stability: 1.5 to 6.5
Economical



puriFlash® SI-HP

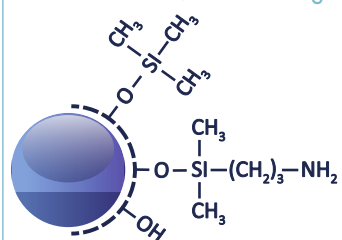
60Å - 500m²/g
5, 10, 15, 30 & 50µm
pH stability: 1.5 to 6.5
High efficiency



puriFlash® SI-HC

60Å - 680m²/g
1.5, 25 & 50µm
pH stability: 1.5 to 6.5
Greater loading capacity & productivity
Low back pressure

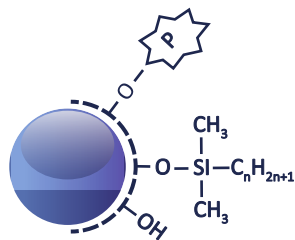
Normal Phase / Ion exchange



puriFlash® NH2

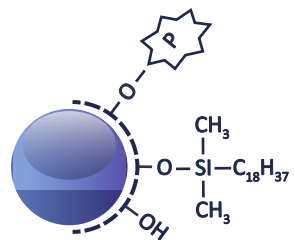
100Å - 300m²/g
5, 10, 15, 30 & 50 µm
Amino
%C: 4
End-capping: One-step
pH stability: 2 to 6.5
Can be both a weak anion exchanger for strong acids or a polar phase that can interact with the OH, NH, SH... functions.

Reverse Phase



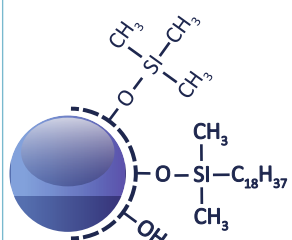
puriFlash® RP-AQ

60Å - 500m²/g
1.5 & 30µm
RPalkyl
%C: 6
End-capping: Mixte
pH stability: 2 to 7.5
The bonding chemistry makes it possible to start the gradient at a 100% water. Suitable for the separation and purification of strongly and moderately polar molecules. Compared to a C18, the peaks are eluted earlier from the beginning of the gradient.



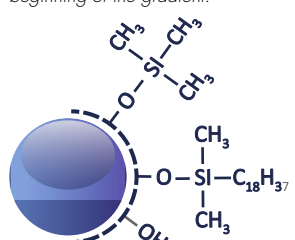
puriFlash® C18-AQ

100Å - 300m²/g
5, 10, 15 & 30µm
C18 Mono-functional
%C: 14
End-capping: Mixte
pH stability: 2 to 7.5
The bonding chemistry makes it possible to start the gradient at a 100% water. Suitable for the separation and purification of moderately polar and non-polar molecules.

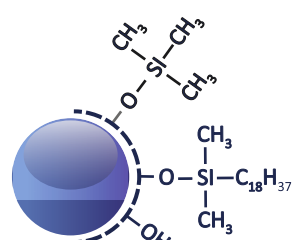


puriFlash® C18-HP

100Å - 300m²/g
5, 10, 15, 30 & 50µm
C18 Mono-functional
%C: 16,5
End-capping: One-step
pH stability: 1.5 to 7.5
Suitable for multiple pharmaceutical applications.
This is an excellent choice for routine reverse phase purifications.

Uptisphere® Strategy™
C18-HQ

100Å - 425m²/g
1.7, 2.2, 3, 5, 10, 15µm
C18 Mono-functional
%C: 19
End-capping: Multi-step
pH stability: 1 to 10.0
Suitable for many pharmaceutical applications and routine methods.
Its specific surface area of 425m²/g gives it a high loading capacity.

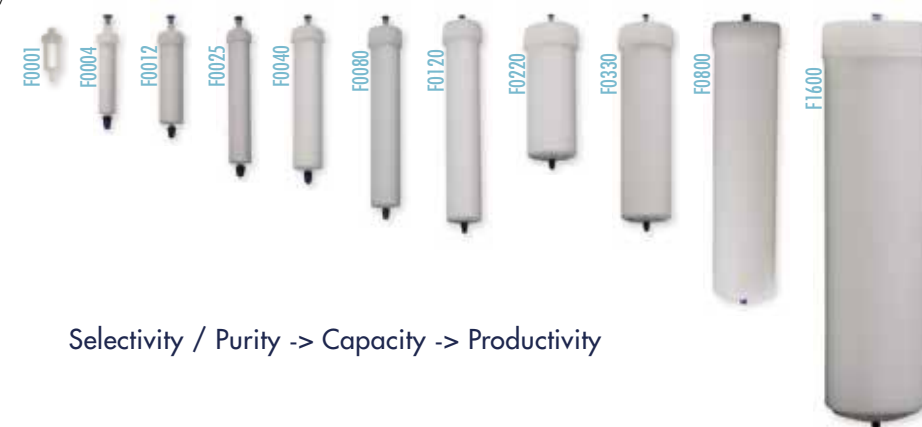


puriFlash® C18-XS

100Å - 300m²/g
5, 10, 15 & 30µm
C18 Mono-functional
%C: 17
End-capping: Multi-step
pH stability: 1 to 10.0
The proprietary end-capping multi-step technology ensures stability under high pH conditions, up to 10. It is an excellent phase for the complete separation of basic molecules.

Flash columns

We offer more than 35 selections for the purification of small & bio-molecules. Our Ultra Pure Spherical Silica combined with our chemistry establishes optimized sample recovery and makes easier transfer from analytical to purification. Interchim® Genius allows an easy transfer from any TLC or analytical data from any columns to "ready-to-go" and safe Gradient Purification Method RFID Traceability.



Selectivity / Purity -> Capacity -> Productivity

Code	F0001	F0004	F0012	F0025	F0040	F0080	F0120	F0220	F0330	F0800	F1600
Ø int. (mm)	9	12	21	21	27	31	36	60	60	78	104
L (mm)	26	68	84	133	135	205	224	153	226	341	385
V ₀ (mL)	1.2	5	19	32	48	102	153	269	405	1 078	2 170
Flowrate - Typical (mL/min)	2.5	5	15	15	26	34	46	127	127	216	383
Flowrate - Range (mL/min)	1-10	5-20	15-50	15-50	20-70	30-100	40-150	80-300	80-300	150-300	200-500

LC Preparative columns

Preparative columns range from 10.0 to 50.8mm i.d and are for the purification of samples ranging from 0.5mg to 1 gram.



Column tubing & column packing

The tube polishing value (Ra) has a fundamental importance in preparative chromatography. A primary reason for broad peaks and low efficiency is the utilization of poor quality tubing. Molecules in the center of the mobile phase stream can move more rapidly than molecules closer to the side due to friction against the tubing surface.

The lower the Ra value, the smoother the surface is, and the less "drag" the tubing will place upon a given separation. Modulo-cart preparative columns pay particular attention to this potential negative phenomenon. All columns have extremely smooth internal surfaces (typically 8µ inch of Ra) to considerably reduce issues of drag and maintain column efficiency.

Efficiency is also managed through Interchim®'s state-of-the-art proprietary packing processes - Modulo-cart Prep can withstand packing pressures up to 550bar contributing strongly to a good bed stability and column life.

Sample dispersion

The loading of sample onto a preparative column requires stringent management to establish quality separations. Column overloading results in a poor retention of pure fraction and therefore particular attention needs to be placed upon selecting the appropriate column dimension and the properties of the stationary phase.

In addition, careful sample introduction control to the column is necessary to establish a homogeneous sample dispersion through the sorbent bead head. Sample typically enters a preparative column through a 1/16" fitting; poor sample loading will lead to overloading certain areas of the stationary phase whilst other areas will be underloaded.

E.g. For a 50mm i.d column with a 500µm i.d capillary fitting - sample introduced to the column (without any sample distributor) will only interact with 0.01% of the surface head. In addition to a dramatic loss in capacity there will also be a high potential for the column head to prematurely clog, rapidly reducing column life.

To prevent this problem, Interchim®'s Modulo-cart Preparative columns are outfitted with a sample distributor. The sample distributor design maximizes the efficiency of sample volume dispersion and the sample mass introduced to the surface of the column head extending column life.

PURIFLASH® COLUMNS

puriFlash® NH2HC

Flash Columns	50µm	Qty
F0004	PF-50NH2HC-F0004	4u
F0012	PF-50NH2HC-F0012	2u
F0025	PF-50NH2HC-F0025	1u
F0040	PF-50NH2HC-F0040	1u
F0080	PF-50NH2HC-F0080	1u
F0120	PF-50NH2HC-F0120	1u
F0220	PF-50NH2HC-F0220	1u
F0330	PF-50NH2HC-F0330	1u
F0800	PF-50NH2HC-F0800	1u
F1600	PF-50NH2HC-F1600	1u

100Å - 300m²/g
5, 10, 15, 30 & 50 µm
Amino
%C: 4
End-capping: One-step
pH stability: 2 to 6.5

puriFlash® RP-AQ

LC Preparative Columns	15µm	Qty
250 x 4.6mm	PF15RPAQ-250/P46	1u
150 x 10.0mm	PF15RPAQ-150/100	1u
250 x 10.0mm	PF15RPAQ-250/100	1u
50 x 21.2mm	PF15RPAQ-050/212	1u
100 x 21.2mm	PF15RPAQ-100/212	1u
150 x 21.2mm	PF15RPAQ-150/212	1u
250 x 21.2mm	PF15RPAQ-250/212	1u
50 x 30.0mm	PF15RPAQ-050/300	1u
100 x 30.0mm	PF15RPAQ-100/300	1u
150 x 30.0mm	PF15RPAQ-150/300	1u
250 x 30.0mm	PF15RPAQ-250/300	1u
50 x 50.0mm	PF15RPAQ-050/500	1u
250 x 50.0mm	PF15RPAQ-250/500	1u

60Å - 500m²/g
15 & 30µm
RPalkyl
%C: 6
End-capping: Mixte
pH stability: 2 to 7.5

puriFlash® RP-AQ

Flash Columns	15µm	Qty	30µm	Qty
F0001	SC-15RPAQ-F0001	25u	---	---
F0004	PF-15RPAQ-F0004	4u	PF-30RPAQ-F0004	4u
F0012	PF-15RPAQ-F0012	2u	PF-30RPAQ-F0012	2u
F0025	PF-15RPAQ-F0025	1u	PF-30RPAQ-F0025	1u
F0040	PF-15RPAQ-F0040	1u	PF-30RPAQ-F0040	1u
F0080	PF-15RPAQ-F0080	1u	PF-30RPAQ-F0080	1u
F0120	PF-15RPAQ-F0120	1u	PF-30RPAQ-F0120	1u
F0220	PF-15RPAQ-F0220	1u	PF-30RPAQ-F0220	1u
F0330	PF-15RPAQ-F0330	1u	PF-30RPAQ-F0330	1u
F0800	---	---	PF-30RPAQ-F0800	1u
F1600	---	---	PF-30RPAQ-F1600	1u

60Å - 500m²/g
15 & 30µm
RPalkyl
%C: 6
End-capping: Mixte
pH stability: 2 to 7.5



PURIFLASH® COLUMNS

Uptisphere® Strategyim C18-HQ

LC Preparative Columns	5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	US5C18HQ-250/P46	1u	US10C18HQ-250/P46	1u	US15C18HQ-250/P46	1u
150 x 10.0mm	US5C18HQ-150/100	1u	US10C18HQ-150/100	1u	US15C18HQ-150/100	1u
250 x 10.0mm	US5C18HQ-250/100	1u	US10C18HQ-250/100	1u	US15C18HQ-250/100	1u
50 x 21.2mm	US5C18HQ-050/212	1u	US10C18HQ-050/212	1u	US15C18HQ-050/212	1u
100 x 21.2mm	US5C18HQ-100/212	1u	US10C18HQ-100/212	1u	US15C18HQ-100/212	1u
150 x 21.2mm	US5C18HQ-150/212	1u	US10C18HQ-150/212	1u	US15C18HQ-150/212	1u
250 x 21.2mm	US5C18HQ-250/212	1u	US10C18HQ-250/212	1u	US15C18HQ-250/212	1u
50 x 30.0mm	US5C18HQ-050/300	1u	US10C18HQ-050/300	1u	US15C18HQ-050/300	1u
100 x 30.0mm	US5C18HQ-100/300	1u	US10C18HQ-100/300	1u	US15C18HQ-100/300	1u
150 x 30.0mm	US5C18HQ-150/300	1u	US10C18HQ-150/300	1u	US15C18HQ-150/300	1u
250 x 30.0mm	US5C18HQ-250/300	1u	US10C18HQ-250/300	1u	US15C18HQ-250/300	1u
50 x 50.0mm	US5C18HQ-050/500	1u	US10C18HQ-050/500	1u	US15C18HQ-050/500	1u
250 x 50.0mm	US5C18HQ-250/500	1u	US10C18HQ-250/500	1u	US15C18HQ-250/500	1u

100Å - 425m²/g
1.7, 2.2, 3, 5, 10,
15µm
C18 Mono-functional
%C: 19
End-capping: Multi-step
pH stability: 1 to 10.0

Flash Columns

Flash Columns	15µm	Qty
F0001	SC-15C18HQ-F0001	25u
F0004	PF-15C18HQ-F0004	4u
F0012	PF-15C18HQ-F0012	2u
F0025	PF-15C18HQ-F0025	1u
F0040	PF-15C18HQ-F0040	1u
F0080	PF-15C18HQ-F0080	1u
F0120	PF-15C18HQ-F0120	1u
F0220	PF-15C18HQ-F0220	1u
F0330	PF-15C18HQ-F0330	1u

100Å - 425m²/g
1.7, 2.2, 3, 5, 10,
15µm
C18 Mono-functional
%C: 19
End-capping: Multi-step
pH stability: 1 to 10.0

puriFlash® C18-XS

LC Preparative Columns	5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	PF5C18XS-250/P46	1u	PF10C18XS-250/P46	1u	PF15C18XS-250/P46	1u
150 x 10.0mm	PF5C18XS-150/100	1u	PF10C18XS-150/100	1u	PF15C18XS-150/100	1u
250 x 10.0mm	PF5C18XS-250/100	1u	PF10C18XS-250/100	1u	PF15C18XS-250/100	1u
50 x 21.2mm	PF5C18XS-050/212	1u	PF10C18XS-050/212	1u	PF15C18XS-050/212	1u
100 x 21.2mm	PF5C18XS-100/212	1u	PF10C18XS-100/212	1u	PF15C18XS-100/212	1u
150 x 21.2mm	PF5C18XS-150/212	1u	PF10C18XS-150/212	1u	PF15C18XS-150/212	1u
250 x 21.2mm	PF5C18XS-250/212	1u	PF10C18XS-250/212	1u	PF15C18XS-250/212	1u
50 x 30.0mm	PF5C18XS-050/300	1u	PF10C18XS-050/300	1u	PF15C18XS-050/300	1u
100 x 30.0mm	PF5C18XS-100/300	1u	PF10C18XS-100/300	1u	PF15C18XS-100/300	1u
150 x 30.0mm	PF5C18XS-150/300	1u	PF10C18XS-150/300	1u	PF15C18XS-150/300	1u
250 x 30.0mm	PF5C18XS-250/300	1u	PF10C18XS-250/300	1u	PF15C18XS-250/300	1u
50 x 50.0mm	PF5C18XS-050/500	1u	PF10C18XS-050/500	1u	PF15C18XS-050/500	1u
250 x 50.0mm	PF5C18XS-250/500	1u	PF10C18XS-250/500	1u	PF15C18XS-250/500	1u

100Å - 300m²/g
5, 10, 15 & 30µm
C18 Mono-functional
%C: 17
End-capping: Multi-step
pH stability: 1 to 10.0

Flash Columns

Flash Columns	15µm	Qty	30µm	Qty
F0001	SC-15C18XS-F0001	25u	---	---
F0004	PF-15C18XS-F0004	4u	PF-30C18XS-F0004	4u
F0012	PF-15C18XS-F0012	2u	PF-30C18XS-F0012	2u
F0025	PF-15C18XS-F0025	1u	PF-30C18XS-F0025	1u
F0040	PF-15C18XS-F0040	1u	PF-30C18XS-F0040	1u
F0080	PF-15C18XS-F0080	1u	PF-30C18XS-F0080	1u
F0120	PF-15C18XS-F0120	1u	PF-30C18XS-F0120	1u
F0220	PF-15C18XS-F0220	1u	PF-30C18XS-F0220	1u
F0330	PF-15C18XS-F0330	1u	PF-30C18XS-F0330	1u
F0800	---	---	PF-30C18XS-F0800	1u
F1600	---	---	PF-30C18XS-F1600	1u

100Å - 300m²/g
5, 10, 15 & 30µm
C18 Mono-functional
%C: 17
End-capping: Multi-step
pH stability: 1 to 10.0

PURIFLASH® COLUMNS

puriFlash® C18-HP

LC Preparative Columns		5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	PF5C18HP-250/P46	1u	PF10C18HP-250/P46	1u	PF15C18HP-250/P46	1u	1u
150 x 10.0mm	PF5C18HP-150/100	1u	PF10C18HP-150/100	1u	PF15C18HP-150/100	1u	1u
250 x 10.0mm	PF5C18HP-250/100	1u	PF10C18HP-250/100	1u	PF15C18HP-250/100	1u	1u
50 x 21.2mm	PF5C18HP-050/212	1u	PF10C18HP-050/212	1u	PF15C18HP-050/212	1u	1u
100 x 21.2mm	PF5C18HP-100/212	1u	PF10C18HP-100/212	1u	PF15C18HP-100/212	1u	1u
150 x 21.2mm	PF5C18HP-150/212	1u	PF10C18HP-150/212	1u	PF15C18HP-150/212	1u	1u
250 x 21.2mm	PF5C18HP-250/212	1u	PF10C18HP-250/212	1u	PF15C18HP-250/212	1u	1u
50 x 30.0mm	PF5C18HP-050/300	1u	PF10C18HP-050/300	1u	PF15C18HP-050/300	1u	1u
100 x 30.0mm	PF5C18HP-100/300	1u	PF10C18HP-100/300	1u	PF15C18HP-100/300	1u	1u
150 x 30.0mm	PF5C18HP-150/300	1u	PF10C18HP-150/300	1u	PF15C18HP-150/300	1u	1u
250 x 30.0mm	PF5C18HP-250/300	1u	PF10C18HP-250/300	1u	PF15C18HP-250/300	1u	1u
50 x 50.0mm	PF5C18HP-050/500	1u	PF10C18HP-050/500	1u	PF15C18HP-050/500	1u	1u
250 x 50.0mm	PF5C18HP-250/500	1u	PF10C18HP-250/500	1u	PF15C18HP-250/500	1u	1u

100Å - 300m²/g
5, 10, 15, 30 & 50µm
C18 Mono-functional
%C: 16,5
End-capping: One-step
pH stability: 1.5 to 7.5

Flash Columns		15µm	Qty	30µm	Qty	50µm	Qty
F0001	SC-15C18HPF0001	25u	---	---	---	---	---
F0004	PF-15C18HPF0004	4u	PF-30C18HPF0004	25u	PF-50C18HPF0004	25u	25u
F0012	PF-15C18HPF0012	2u	PF-30C18HPF0012	4u	PF-50C18HPF0012	4u	4u
F0025	PF-15C18HPF0025	1u	PF-30C18HPF0025	2u	PF-50C18HPF0025	2u	2u
F0040	PF-15C18HPF0040	1u	PF-30C18HPF0040	1u	PF-50C18HPF0040	1u	1u
F0080	PF-15C18HPF0080	1u	PF-30C18HPF0080	1u	PF-50C18HPF0080	1u	1u
F0120	PF-15C18HPF0120	1u	PF-30C18HPF0120	1u	PF-50C18HPF0120	1u	1u
F0220	PF-15C18HPF0220	1u	PF-30C18HPF0220	1u	PF-50C18HPF0220	1u	1u
F0330	PF-15C18HPF0330	1u	PF-30C18HPF0330	1u	PF-50C18HPF0330	1u	1u
F0800	---	---	PF-30C18HPF0800	1u	PF-50C18HPF0800	1u	1u
F1600	---	---	PF-30C18HPF1600	1u	PF-50C18HPF1600	1u	1u

100Å - 300m²/g
5, 10, 15, 30 & 50µm
C18 Mono-functional
%C: 16,5
End-capping: One-step
pH stability: 1.5 to 7.5

puriFlash® C18-AQ

LC Preparative Columns		5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	PF5C18AQ-250/P46	1u	PF10C18AQ-250/P46	1u	PF15C18AQ-250/P46	1u	1u
150 x 10.0mm	PF5C18AQ-150/100	1u	PF10C18AQ-150/100	1u	PF15C18AQ-150/100	1u	1u
250 x 10.0mm	PF5C18AQ-250/100	1u	PF10C18AQ-250/100	1u	PF15C18AQ-250/100	1u	1u
50 x 21.2mm	PF5C18AQ-050/212	1u	PF10C18AQ-050/212	1u	PF15C18AQ-050/212	1u	1u
100 x 21.2mm	PF5C18AQ-100/212	1u	PF10C18AQ-100/212	1u	PF15C18AQ-100/212	1u	1u
150 x 21.2mm	PF5C18AQ-150/212	1u	PF10C18AQ-150/212	1u	PF15C18AQ-150/212	1u	1u
250 x 21.2mm	PF5C18AQ-250/212	1u	PF10C18AQ-250/212	1u	PF15C18AQ-250/212	1u	1u
50 x 30.0mm	PF5C18AQ-050/300	1u	PF10C18AQ-050/300	1u	PF15C18AQ-050/300	1u	1u
100 x 30.0mm	PF5C18AQ-100/300	1u	PF10C18AQ-100/300	1u	PF15C18AQ-100/300	1u	1u
150 x 30.0mm	PF5C18AQ-150/300	1u	PF10C18AQ-150/300	1u	PF15C18AQ-150/300	1u	1u
250 x 30.0mm	PF5C18AQ-250/300	1u	PF10C18AQ-250/300	1u	PF15C18AQ-250/300	1u	1u
50 x 50.0mm	PF5C18AQ-050/500	1u	PF10C18AQ-050/500	1u	PF15C18AQ-050/500	1u	1u
250 x 50.0mm	PF5C18AQ-250/500	1u	PF10C18AQ-250/500	1u	PF15C18AQ-250/500	1u	1u

100Å - 300m²/g
5, 10, 15 & 30µm
C18 Mono-functional
%C: 14
End-capping: Mixte
pH stability: 2 to 7.5

Flash Columns		15µm	Qty	30µm	Qty
F0001	SC-15C18AQF0001	25u	---	---	---
F0004	PF-15C18AQF0004	4u	PF-30C18AQF0004	4u	4u
F0012	PF-15C18AQF0012	2u	PF-30C18AQF0012	2u	2u
F0025	PF-15C18AQF0025	1u	PF-30C18AQF0025	1u	1u
F0040	PF-15C18AQF0040	1u	PF-30C18AQF0040	1u	1u
F0080	PF-15C18AQF0080	1u	PF-30C18AQF0080	1u	1u
F0120	PF-15C18AQF0120	1u	PF-30C18AQF0120	1u	1u
F0220	PF-15C18AQF0220	1u	PF-30C18AQF0220	1u	1u
F0330	PF-15C18AQF0330	1u	PF-30C18AQF0330	1u	1u
F0800	---	---	PF-30C18AQF0800	1u	1u
F1600	---	---	PF-30C18AQF1600	1u	1u

100Å - 300m²/g
5, 10, 15 & 30µm
C18 Mono-functional
%C: 14
End-capping: Mixte
pH stability: 2 to 7.5

PURIFLASH® DRY-LOAD

Solid Sample

Dry injection



Allow to large sample amounts

High pressure dry-load



Dry-load columns for solid deposits allow the injection of a raw sample insoluble (or soluble) in the mobile phase. Compared to liquid injection, the solid deposit avoids the diffusion of raw sample in the purification column. It improves resolution, efficiency and purity of the products collected.

The solid deposit can be made with silica, C18 or Celite. Unlike open cartridges, it does not require the use of a piston or specific adapters. The max. pressure is 2x the standard solid deposit cartridges. They are compatible with the use of Interchim® 15µm puriFlash® columns and with all purification systems.

puriFlash® Dry-Load

Nature	Type	Format	P/N	Qty
puriFlash® Dry-Load	Empty	F0004	PF-DLE-F0004	20u
		F0012	PF-DLE-F0012	20u
		F0025	PF-DLE-F0025	20u
		F0040	PF-DLE-F0040	20u
		F0060	PF-DLE-F0060	10u
		F0080	PF-DLE-F0080	5u
		F0100	PF-DLE-F0100	5u
		F0120	PF-DLE-F0120	5u
		F0220	PF-DLE-F0220	5u
		F0330	PF-DLE-F0330	5u
puriFlash® Dry-Load - Tightening tool		JV0470		1u
puriFlash® Dry-Load	SILICA HC 80%	F0004	PF-DLE-F0004	20u
		F0012	PF-DLE-F0012	20u
		F0025	PF-DLE-F0025	20u
		F0040	PF-DLE-F0040	20u
puriFlash® Dry-Load	SILICA HC 50%	F0004	PF-DLSIHC05-F0004	20u
		F0012	PF-DLSIHC05-F0012	20u
		F0025	PF-DLSIHC05-F0025	20u
		F0040	PF-DLSIHC05-F0040	20u
puriFlash® Dry-Load	CELITE 80%	F0004	PF-DLCET08-F0004	20u
		F0012	PF-DLCET08-F0012	20u
		F0025	PF-DLCET08-F0025	20u
		F0040	PF-DLCET08-F0040	20u
puriFlash® Dry-Load	C18 STD 80%	F0004	PF-DLIRC1808-F0004	5u
		F0012	PF-DLIRC1808-F0012	5u
		F0025	PF-DLIRC1808-F0025	5u
		F0040	PF-DLIRC1808-F0040	5u
puriFlash® Dry-Load	C18 STD 50%	F0004	PF-DLIRC1805-F0004	5u
		F0012	PF-DLIRC1805-F0012	5u
		F0025	PF-DLIRC1805-F0025	5u
		F0040	PF-DLIRC1805-F0040	5u

High-Pressure Dry-Load

Nature	Type	Format	P/N	Qty
puriFlash® HP Dry-Load	Empty	50 x 21.2mm	OA0320	1u
		75 x 21.2mm	OA0330	1u
		100 x 21.2mm	7A1870	1u
		50 x 30mm	OA0340	1u
		75 x 30mm	OA0350	1u
		100 x 30mm	7A1880	1u

puriFlash® Dry-Load - Tightening tool

Spanner wrench for 21.2mm ID	7A1590	1u
Spanner wrench for 30mm ID	7A1610	1u

Replacement frit

Replacement frit for 21.2mm ID	OA2100	1u
Replacement frit for 30mm ID	OA2110	1u







puriFlash® XS 520 Plus
300mL/min - 20bar
Small, but Mighty



puriFlash® 5.020
300mL/min - 20bar
The Partner of Daily Challenges



puriFlash® 5.050
250mL/min - 250bar
Cross-over Flash /Prep

ULTRA HIGH PERFORMANCE FLASH PURIFICATION



puriFlash® 5.250
250mL/min - 250bar
Optimized for your preparative purifications




puriFlash® 5.400UV
125mL/min - 400bar
The Ultra-Purification




puriFlash® 5.250P
125mL/min - 250bar
Purification of Complex Mixtures of Peptides


PROCESS PURIFICATION



puriFlash® UP3
100mL/min - 50bar
Ultra Performance Proteins Purification



puriFlash® 535-XL
400mL/min - 35bar
Process-Kilo-Lab



puriFlash® 5.015-XL
825mL/min - 15bar
Process - Kilo-Lab

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