



## ULTRA PERFORMANCE FLASH PURIFICATION



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



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



**puriFlash® 5.050**  
250 mL/min - 50 bar  
Cross-over Flash / Prep

## ULTRA HIGH PERFORMANCE FLASH PURIFICATION



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



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



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

## PROCESS PURIFICATION



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



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



Find the complete range on our website.  
<https://www.flash-chromatography.com/>

=> Download our dedicated literature






**puriFlash® XS 520 Plus**

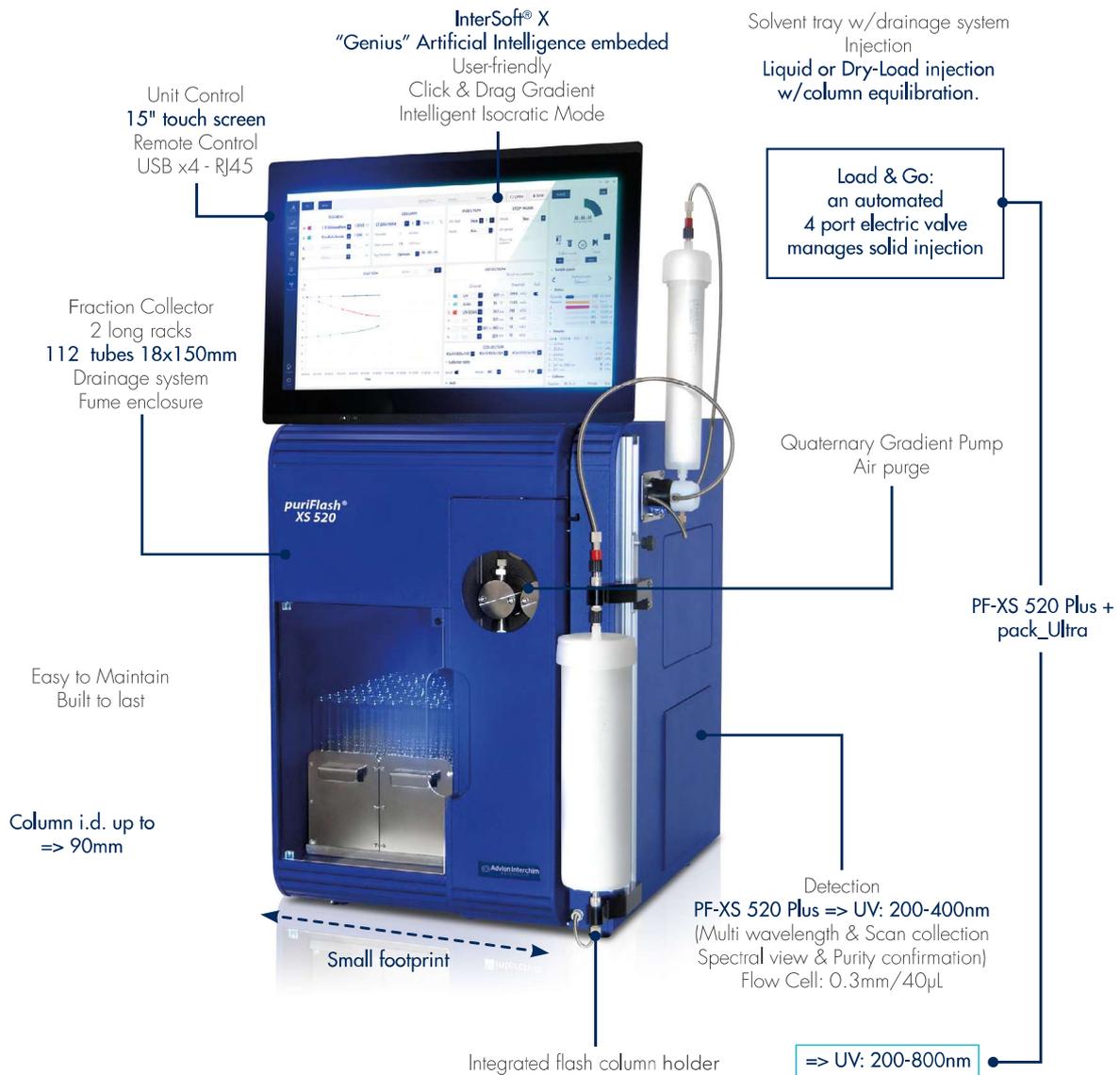
Small Organic molecules  
 Impurity Identification  
 Natural Products  
 Peptides, Oligonucleotides  
 Proteins, Bio-drugs  
 Metabolite Isolation  
 Trace Enrichment



### Small but mighty

Concentrated technology for unmatched performance.

Designed for routine flash purification the technology and unique quality of the pump will take you much further. Increase the pressure and the puriFlash® XS 520 Plus will continue to offer precision, linearity and repeatability to perform complex and sophisticated purifications. No matter whether you're an expert or not, Genius will support you to achieve the best possible purification.



P/N : PFXS52 (220 v)  
 P/N : PFXS53 (110 v)



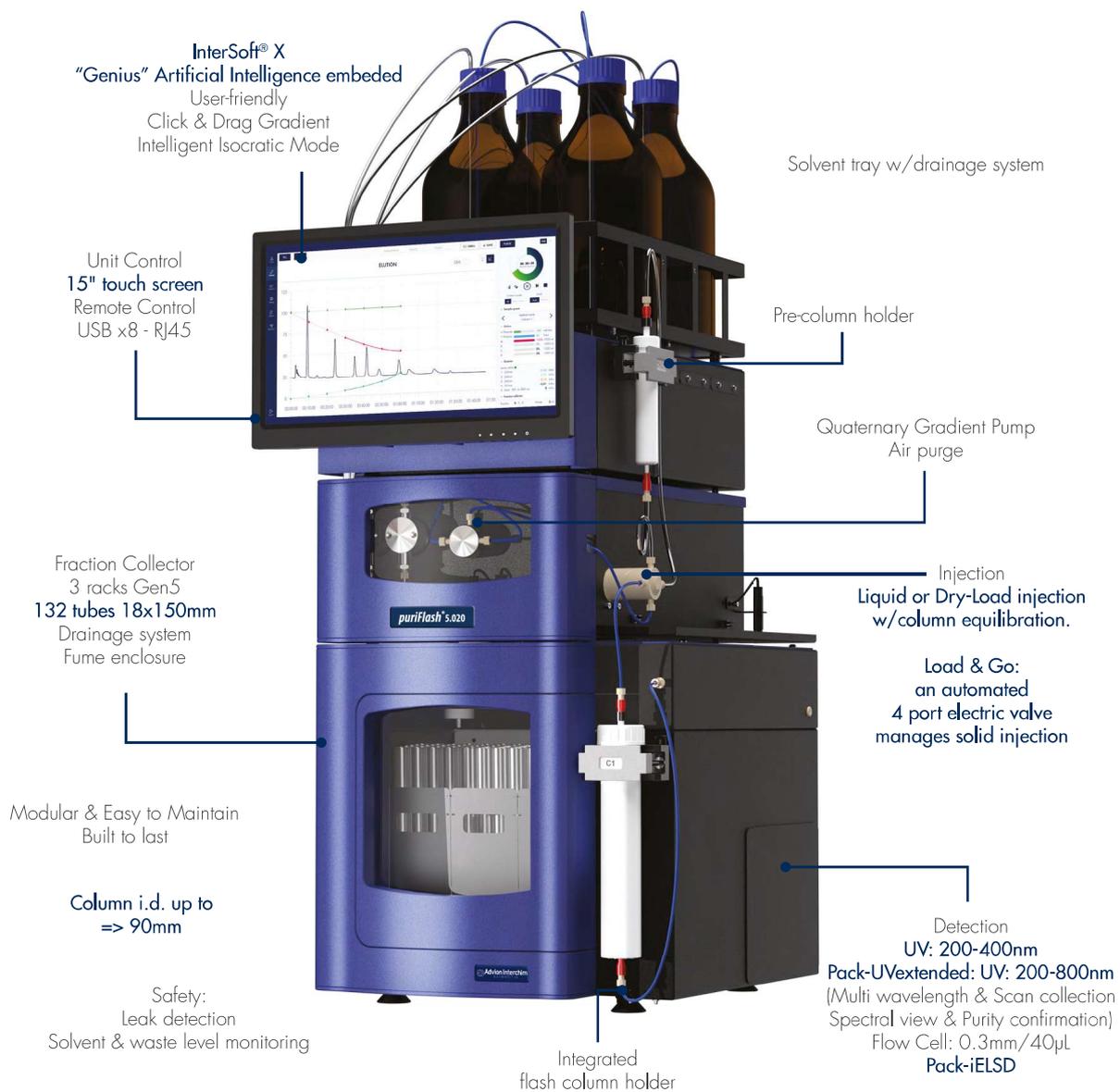
### puriFlash® 5.020



### The partner for your everyday challenges

Access to automation and more security. Spend more time on your purifications, allowing the integrated technology of the puriFlash® 5.020 to manage your system. This includes benefits such as an RFID detector, sensors for unexpected leakage, solvent level sensors and more.

- Small Organic molecules
- Impurity Identification
- Natural Products
- Peptides, Oligonucleotides
- Proteins, Bio-drugs
- Metabolite Isolation
- Trace Enrichment



P/N : PFG5A0 (220 v)  
P/N : PFG5A1 (110 v)



# LC PURIFICATION

## Ultra High Performance Purification - puriFlash® 5.050

puriFlash® 5.050

Small Organic molecules  
 Impurity Identification  
 Natural Products  
 Peptides, Oligonucleotides  
 Proteins, Bio-drugs  
 Metabolite Isolation  
 Trace Enrichment



250  
mL/min

up to  
80mm i.d.  
Col.

50  
bar

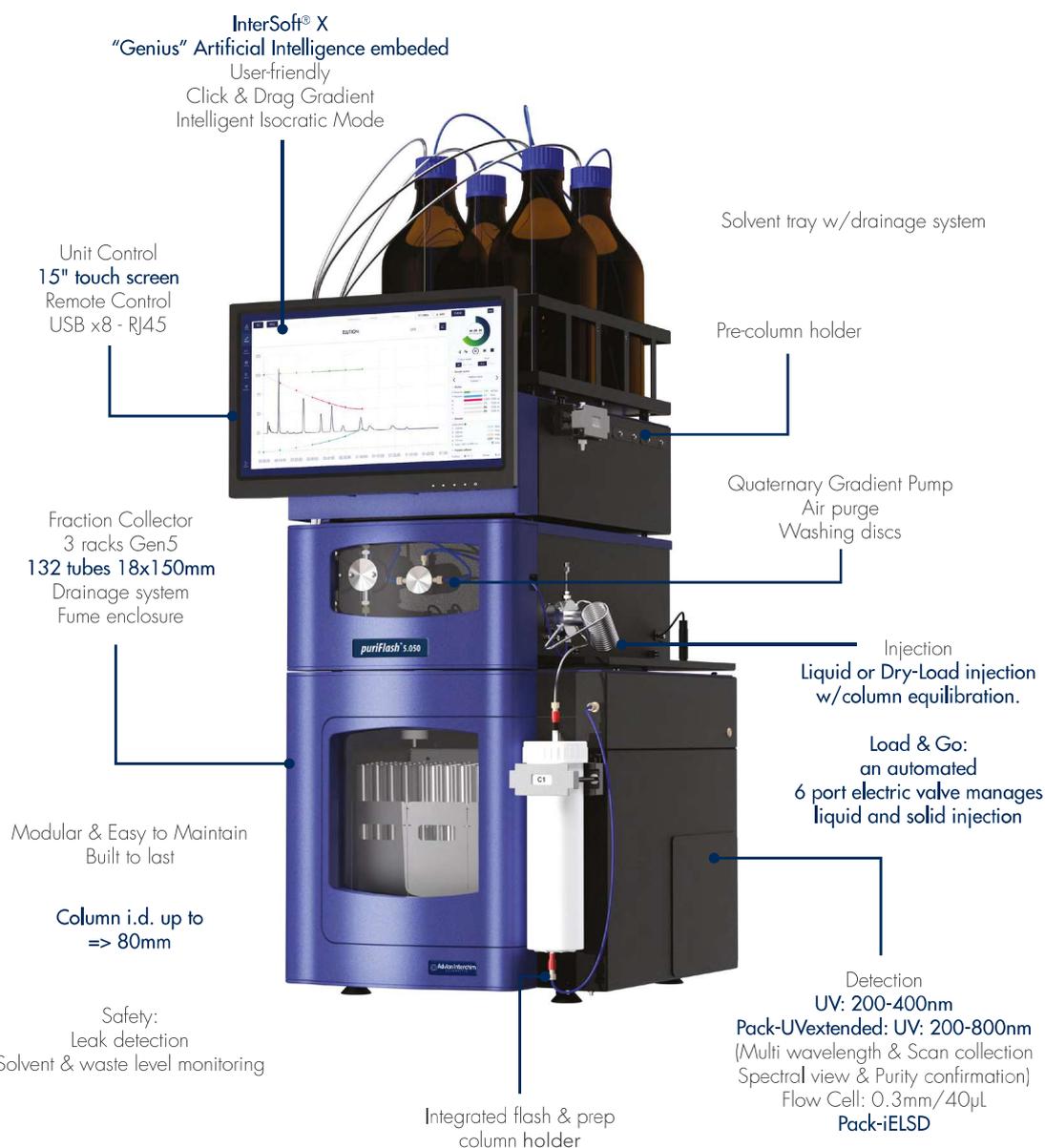
### Cross-over Flash / Prep

Access to preparative chromatography.

A single instrument to perform both flash and preparative purifications.

Switch from normal to reverse phase and work with reusable columns.

Build eco-friendly methods with sustainable purification development.



Flash  
& Go



Load  
& Go



Boost  
& Go

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



	Flash Purification XS 520 Plus			Flash Purification 5.020	Flash Purification 5.050
<b>Pump</b>					
Flow rate	300 mL/min			300 mL/min	250 mL/min
Max. pressure	20 bar			20 bar	50 bar
Quaternary Gradient	yes			yes	yes
Air purge	yes			yes	yes
Washing discs	no			no	yes
Pump washing discs (pack)	no			no	no
<b>Detector</b>					
	<b>*Plus</b>	<b>_UVextended</b>	<b>_Ultra</b>		
UV: 200 - 400 nm multi wavelength & scan collection	yes	no	no	yes	yes
UV: 200 - 800 nm multi wavelength & scan collection	no	yes	yes	<b>pack-UVextended</b>	<b>pack-UVextended</b>
Spectral view & purity confirmation		yes		yes	yes
iELSD Detection (pack)		no		<b>pack-iELSD</b>	<b>pack-iELSD</b>
<b>Injection</b>					
	<b>*Plus</b>	<b>_UVextended</b>	<b>_Ultra</b>		
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
<b>Column Selection valve</b>					
6 port electrical valve		no		no	no
<b>System Optimization</b>					
Tubing - after pump		1/8" x 1.6 mm id		1/8" x 1.6 mm id	1/8"x1.6 mm id
Flow cell: optical length / Volume		0.3 mm/40 µL		0.3 mm/40 µL	0.3 mm/40 µL
<b>Column Holder</b>					
Integrated		yes		yes	yes
Pre-column holder		no		yes	yes
<b>Fraction Collector</b>					
Regular Collector		2 long racks 112 tubes 18 x 150 mm		3 racks Gen5 132 tubes 18 x 150 mm	3 racks Gen5 132 tubes 18 x 150 mm
<b>Unit control</b>					
Touch screen 15"		yes		yes	yes
USB		4		8	8
RJ45		yes		yes	yes
<b>Software</b>					
Intersoft® X		yes		yes	yes
<b>Safety</b>					
Leak detection (pump, FC, iELSD, holders)		no		yes	yes
Solvent & waste level monitoring		yes		yes	yes
Collector w/drainage system		yes		yes	yes
Solvent level monitoring		no		yes	yes
RFID		no		yes	yes
Fume Enclosure		yes		yes	yes
<b>Size</b>					
		W: 14" - 35.5 cm D: 18.5" - 47 cm H: 30" - 77 cm		W: 15.75" - 40 cm D: 20.0" - 51 cm H: 29.5" - 75 cm	W: 15.75" - 40 cm D: 20.0" - 51 cm H: 29.5" - 75 cm



# LC PURIFICATION

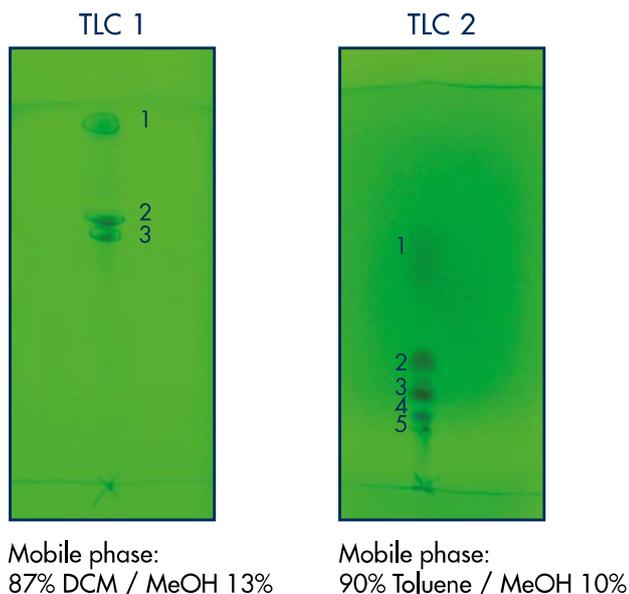
## Genius Application



### Genius Makes Easy & Secured Purifications

Whatever your sample, from any of NP-TLC, NP-LC, NP-LC screening, RP-LC, RP-LC 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

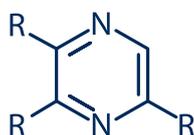


Compound	Rf	CV
1	0.95	1.05
2	0.68	1.47
3	0.64	1.56

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

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  $\Delta R_f$  &  $\Delta CV$ .



## 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	<input checked="" type="checkbox"/>
Rf 0.31	<input checked="" type="checkbox"/>
Rf 0.25	<input checked="" type="checkbox"/>
Rf 0.18	<input checked="" type="checkbox"/>
Rf 0.14	<input checked="" type="checkbox"/>

### 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

GO TO MANUAL METHOD

GO TO RUN

### 3. Flash conditions

**Device:** puriFlash® 5.020

**Solvents: A:** Toluene

**B:** Methanol

**Column:** PF-15SIHP-F0012

**Flow rate:** 15 mL/min

**Injection mode:** Solid deposit with celite  
(Dry-load F0004)

**Crude sample:** 100 mg

**Detection:** UV 265 nm

**Pressure:** 4 bar

**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



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250 mL/min - 250 bar  
Optimized for your  
preparative purifications

