

# HPLC +

## Add-on HPLC Purification System



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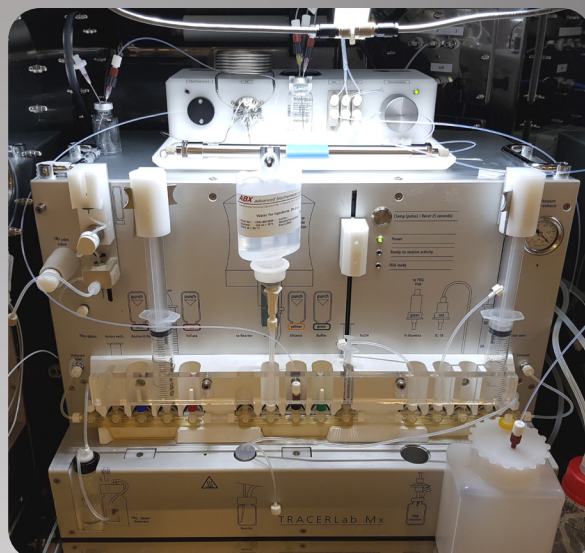
# HPLC+

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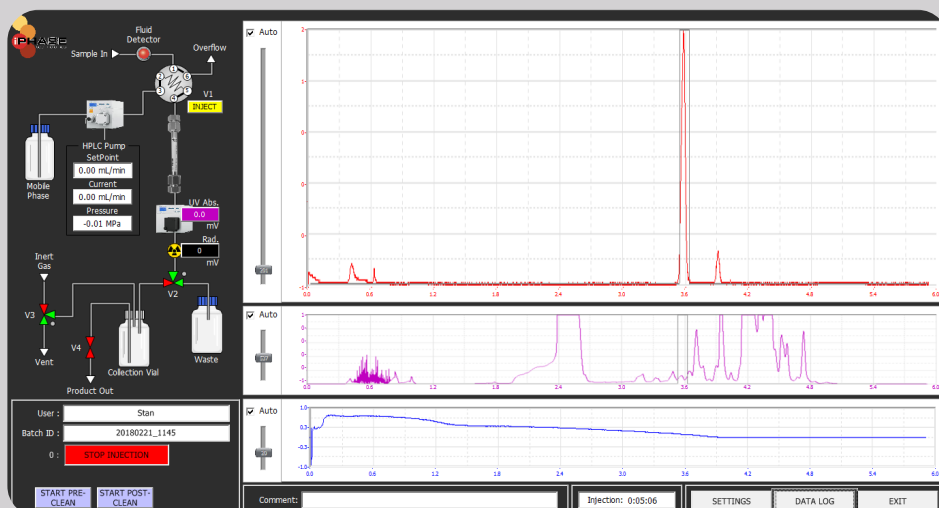


The HPLC+ is a compact system that allows you to add HPLC purification capabilities to any radiosynthesizer which does not have the capability to perform HPLC purification.

Thereby opening up a whole new level synthesis possibilities to your existing hardware.



## Software Interface

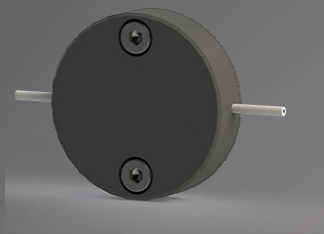


Data logging of all sensor trends with historical trend review .

Can be run on the same PC as the radiosynthesizer's software as a different window.

Ethernet network connection between the PC and the module.





## HPLC Injection Fluid Detector

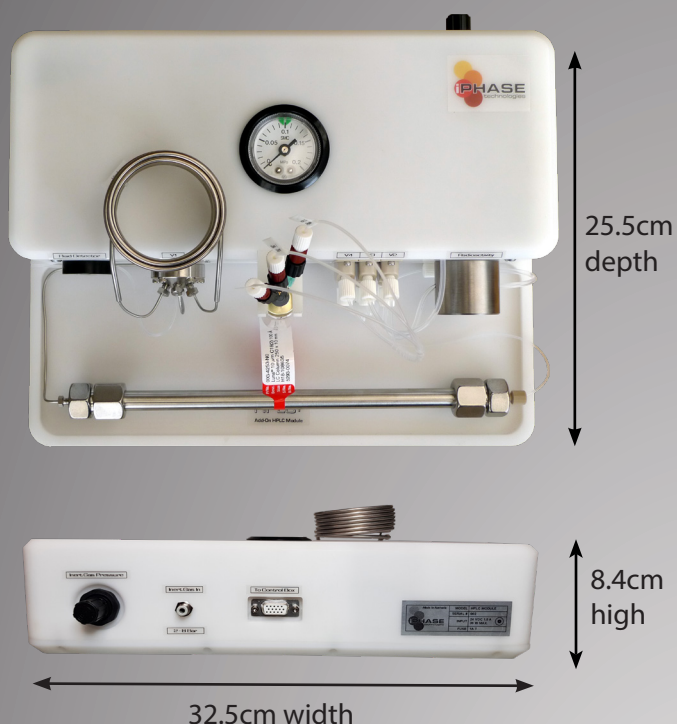
Product injection into the HPLC loop's is controlled by a software calibrated optical fluid detector. This detector allows on the fly adjustment of the detection threshold so that you never miss your product injection.



## HPLC Radioactivity Detector

Tungsten shielded radioactivity detector (CsI(Tl) crystal PIN photodiode) provides a linear response across a large radioactivity range.

## Dimensions



## External PLC

The HPLC+ PLC (programmable logic controller) electronics are housed in an external enclosure located outside of the hotcell.

This eliminates the possibility of damage to the electronic components due to high radiation fields thereby significantly increasing system reliability.

There is a single electrical cable connection between the external controller and the HPLC module inside the hotcell.



## HPLC Pump

10 or 50mL/min pump head with integrated pressure sensor. (Can be upgraded to a quaternary low pressure gradient pump with a degasser).



## Fibre Optic UV Detector

Variable wavelength UV detector with fibre optic remote flow cell whereby only the flow cell is located inside the hotcell which frees up valuable hotcell space compared to traditional UV detectors.

# Technical Specifications

Hardware	
Process Valve	<ul style="list-style-type: none"><li>• 3 chemically inert PEEK solenoid valves</li><li>• Kalrez® seals, 2.5 bar, 1.4 mm orifice, 20 mL dead volume</li></ul>
HPLC Valves	<ul style="list-style-type: none"><li>• 6 port electric injector, 0.40mm bore, N60 S.S. stator, valcon H rotor</li></ul>
HPLC Pump	<ul style="list-style-type: none"><li>• Knauer HPLC pump with 10 or 50 mL/min pump head</li><li>• Optional quaternary L.P.G. &amp; quad channel degasser</li></ul>
HPLC UV Detector	<ul style="list-style-type: none"><li>• Knauer UV/VIS detector with remote fibre optic flow cell</li><li>• Variable wavelength (190-750 nm)</li></ul>
Automation	<ul style="list-style-type: none"><li>• External Industrial PLC with Ethernet communications to interface computer</li></ul>

Sensors	
Radioactivity	<ul style="list-style-type: none"><li>• 1 tungsten shielded linear CsI(Tl) crystal PIN diode radioactivity detectors</li></ul>
Pressure	<ul style="list-style-type: none"><li>• Analogue gage sensor for inert gas pressure display</li></ul>
HPLC injector fluid detector	<ul style="list-style-type: none"><li>• 1 software calibrated optical fluid detector</li></ul>

Software	
Graphical Interface	<ul style="list-style-type: none"><li>• Easy to use open platform operator interface with sensor trends, historical data logging &amp; analysis, synthesis reports , multi-level password protected user access, CFR 21 CFR Part 11 &amp; GMP compliant</li></ul>

Utilities and Dimensions	
Inert Gas	<ul style="list-style-type: none"><li>• Helium, Nitrogen or Argon; 2-8 bar (29-116 psi), 1/8" O.D. tube compression connection</li></ul>
Case	<ul style="list-style-type: none"><li>• Compact Acetal (POM)</li><li>• Easy installation (only one electrical cable connection to PC)</li></ul>
Dimensions	<ul style="list-style-type: none"><li>• 325 mm x 84 mm x 25.5mm (WxHxD)</li></ul>

