

RADIO-HPLC

RADIO-HPLC FOR FDG

THE HIGHEST PERFORMING
RADIO-HPLC SYSTEM FOR THE QC
ANALYSIS OF FDG

- LOW LIMIT OF DETECTION WITH SPECIAL POSITRONS DETECTOR
- FAST
- SENSITIVE PULSE AMPEROMETRIC DETECTOR
- COST EFFECTIVE



The Radio-HPLC has been designed with Shimadzu to deliver the best performance and an excellent price / performance ratio for the QC of FDG.

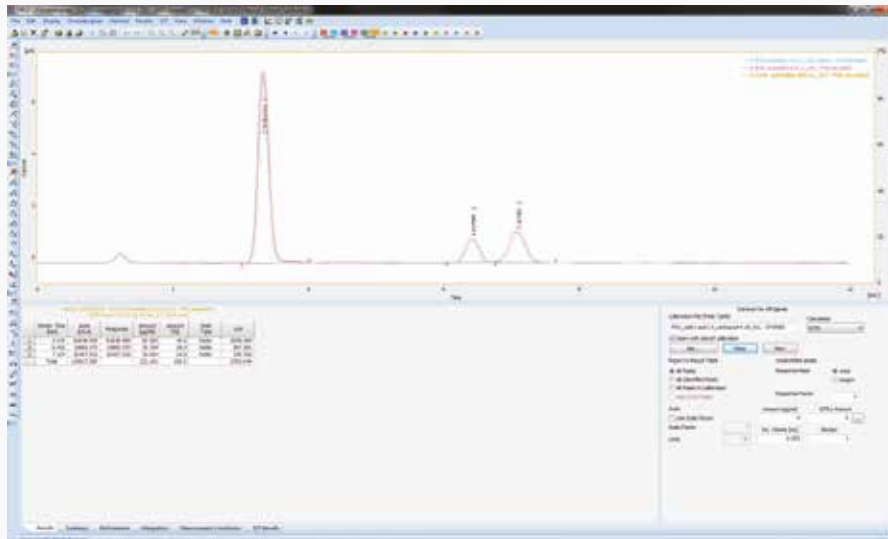
It is the best combination of pump, detector types, software solutions and radio protection you can find in the market. The system contains everything you need to run HPLC testing according to the European Pharmacopoeia for FDG.

The radio-HPLC has been designed to get very short analysis time, very high sensitivity without compromising the resolution.

It contains a Helium purge to avoid carboxylation of NaOH, a degasser, a solvent selection valve, a pump, a column oven, a pulse amperometric detector (PAD) and a PET radio flow detector.

The entire system is controlled by a GMP/GLP compliant software and all signals are integrated digitally without the need of an imprecise analogue to digital conversion.

The software has also an audit trail, user management and is 21 CFR Part11 compliant.



Technical Specifications

Injector	Manual injector	with Start/Stop signal
Helium Purge		
Degasser	Internal volume Peak efficiency Additional channel Number of degassed solvents Degassed flow-line capacity	<400 μ L in under 1 minute for autosampler rinse solution 3 400 μ L
Solvent container		
Solvent Selection valve	Software controlled	
Tandem Dual Plunger Pump	Primary side Secondary side Maximum discharge pressure Flow-rate setting range Flow-rate accuracy Flow-rate precision Pulsation Constant-pressure Solvent delivery Plunger rinsing mechanism Safety measures	47 μ L 23 μ L 40MPa 0.001 to 10.000 mL/min No more than 2% or 2 μ L/min., whichever is greater (0.01 to 5 mL/min.) No more than 0.06% RSD or 0.02 min SD, whichever is greater 0.3 MPa (for water at 1.0 mL/min. and 7MPa) Supported Manual rinsing or automatic rinsing using optional product Liquid-leakage sensor, high-pressure/low-pressure limits
Oven	Temperature Accuracy Stability	From 7°C above ambient to 45°C 0.5 °C 0.1 °C
PAD	Range Filter (cut off) Pulse times Sample times	10 nA – 200 μ A in 1, 2, 5 steps 0.5 – 0.01 Hz in 1, 2, 5 steps t1: 100 - 2000 ms; t2: 0 - 2000 ms; t3: 0 - 2000 ms in 10 ms steps 20 ms - (t1 - 60 ms), with 20 ms increments
PET-radio flow detector		

