

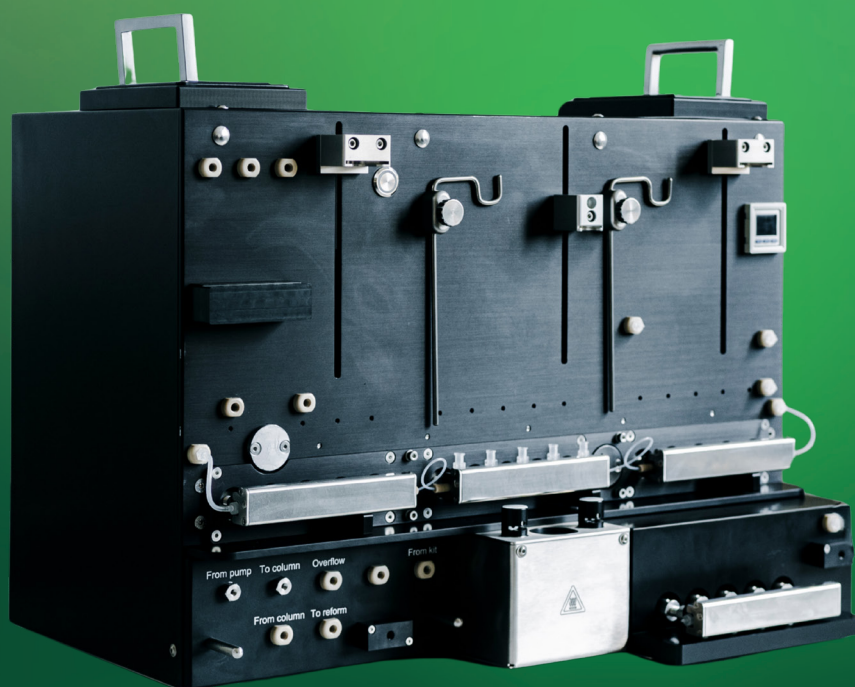


RADIO  
PHARMA  
SOLUTIONS



# NEPTIS<sup>®</sup> xSeed<sup>™</sup>

Next-Gen Radiochemistry  
Research



NEPTIS® xSeed™ is a multi-run synthesizer designed specifically for research and development. Its flexibility, combined with automated cleaning, makes it ideal for creating and testing new radiotracers.

### FASTER METHOD DEVELOPMENT

Purpose-built as a multi-run module enabling up to four consecutive runs with different sequences, NEPTIS® xSeed™ integrates an automated cleaning system and cartridge reconditioning. It enables rapid iteration of chemistries, shortening development timelines and simplifying high-frequency method testing.

### LOWER DEVELOPMENT COST

Design and construct your own non-disposable kit with our associated pack. This avoids the need to purchase, modify, and dispose of expensive cassettes.

### DIRECTLY TRANSFERABLE TO PRODUCTION MODULES

Once a synthesis is validated on NEPTIS® xSeed™, sequences can be transferred directly to NEPTIS® production modules without rework. All FX/FN sequences are also compatible.

### SPE (REFORM) PURIFICATION

NEPTIS® xSeed™ includes a solid phase extraction reformulation module with five built-in actuators for precise handling. A dedicated waste pathway and independent high-flow, low-flow and vacuum supply ensure safe and controlled purification.

### AUTO-CLEANING MODULE

- Bottles: 4 bottles of 250 ml capability (recycling solution for QMA, water, ethanol and acetonitrile)
- Tubing & connection: 1 tube for Nitrogen (pressurization), 1 tube for solvents (cleaning), electronic cables for module control

### ON-THE-GO DEVELOPMENT

The synthesizer is delivered with a complete software suite:

- NEPTIS® Control provides real-time visualization of synthesis data.
- NEPTIS® Designer is a stand-alone software for molecule development or modification.
- NEPTIS® Trending supports production data analysis and key parameter monitoring (e.g. calibration, maintenance logs).

### PURIFICATION FEATURES

- HPLC column: 1 semi-preparative HPLC column
- UV/Pump: UV detector with optical fibers (to protect electronics from radiation) and isocratic HPLC pump fully controlled by NEPTIS® software
- Injection: HPLC pneumatic injection valve (10 ml loop) delivered as standard
- Detectors: VWD (variable wavelength detector) UV detector & radio detector
- SPE: SPE cartridge reformulation system
- Options:

Switch valve: automatic switch valve to detect HPLC column [2]  
Pump: quaternary gradient pump

### GMP COMPLIANCE

ORA is ISO13485 certified since 2014. NEPTIS® documentation meets strict GMP regulations and requirements. The software is 21CFR Part 11 compliant and all NEPTIS® products follow and apply GAMP5 guidelines.

### SPECIFICATIONS

- 4 ramps of 5 pneumatic actuators (3 positions each)
- Reaction volume: 1.5 to 6.0 ml
- Heating zone: 2 heating zones with cooling capabilities  
Alternative: 1 classic oven and 1 Peltier type oven
- Reagent vials positions: 20 for reagent vials or cartridges
- Recovery capability: [<sup>18</sup>O] water recovery
- Radiation detectors: 6 shielded radiation detectors for process monitoring
- 3 syringe drivers: 30 ml and 10/3 ml
- Cleaning system: automated cleaning system
- Reagent vials volume: 1 to 50 ml
- Sensors for vacuum, flow and pressure

### REQUIREMENTS

- Power supply: 100/240V AC, 50-60 Hz
- Compressed air: 6 to 8 bars
- Nitrogen: 3 to 8 bars

### DIMENSIONS

560 x 420 x 400 mm | 22.0 x 16.5 x 16.1 in (w x h x d)  
38 kg | 84 lbs

