

# Synthra RadChromplus

## with Quaternary Gradient Pump (Catalog No. 021q)

Synthra RadChromplus is a complete radio-UV/Vis-HPLC system for routine quality control of any radiotracer. Measuring the radiochemical purity is simple with the user friendly and validated software Chromstar 7. Synthra offers two basic modules: one with an isocratic pump and a second module with a quaternary gradient pump. Both modules can be upgraded individually.

### General Features

- ✓ **Quaternary gradient pump**
  - Micro: Flow rate 0.001 – 2 mL/min (0 – 400 bar)
  - Analyt.: Flow rate 0.001 – 10 mL/min (0 – 400 bar)
  - Preparat.: Flow rate 0.1 – 40 mL/min (0 – 350 bar)
  - Pressure pulsation: typical < 1 bar or < 1%
  - Gradient Range: 0.0 - 100.0 %, 4 channels
  - Gradient Accuracy: < 0.25 %
  - Gradient mixing: active
  - Mixing volume: adjustable: 10 – 500  $\mu$ L
- ✓ **Variable wavelength detector**
  - Baseline Noise:  $\pm 1 \times 10^{-5}$  AU (240 nm, 1 s risetime)
  - Baseline Drift:  $2 \times 10^{-4}$  AU/h
  - Wavelength range: 190 - 900 nm, accuracy:  $\pm 2$  nm
  - Light source: Deuterium and tungsten lamp
  - Output:  $1 \times 1$  V (one channel)
- ✓ **Radioactivity detector**
  - Diode technology for  **$\beta$  particles only**
  - Sensitivity comparable to a 2" NaI well detector
- ✓ **Radioactivity detector NaI(Tl)**
  - 2" NaI(Tl) well detector with 5,5 cm Lead shielding for  $\gamma$ -radiation
- ✓ **Vacuum degasser**
- ✓ **Column oven (20 °C – 100 °C)**
- ✓ **Manual injection valve (20  $\mu$ L sample loop)**
- ✓ **Four eluent solvent supply bottles**

### GMP Features

- ✓ **GMP compliant.** Electronic control and data collection (27/18 channels)
- ✓ **21CFRpart11 & LIMS** compatible



### Terminal Control

- ✓ **A Laptop (Win 10 Pro) and Chromstar 7 are included**
- ✓ **Password protected access to software**

### Possible Upgrades

- ➔ UV-detector upgrades:  $2 \times 1$  V (2 channels) or DAD
- ➔ All wetted stainless steel parts are available in PEEK
- ➔ Additional SPE option (Catalog No. 021spe)