

Synthra RadChromplus

(Catalog No. 021i & 021q)

Synthra RadChromplus is a compact radio-UV/Vis-HPLC system for routine quality control of any radiotracer. The user-friendly software Chromstar 7 allows the measurement of the chemical and radiochemical purity. Available are 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

- ✓ **Variable wavelength detector**
 - Baseline Noise: $\pm 1 \times 10^{-5}$ AU (240 nm, 1 s rise-time)
 - Baseline Drift: 2×10^{-4} AU/h
 - Wavelength range: 190 - 900 nm, accuracy: ± 2 nm
 - Light source: Deuterium and tungsten lamp
- ✓ **Radioactivity detector**
 - ✓ **Diode detector**
 - β particle detector, no shielding required
 - ✓ **NaI(Tl) detector**
 - γ detector, 2" NaI(Tl) well detector with 5.5 cm lead shielding
- ✓ **Online vacuum degasser**
- ✓ **Manual injection valve**
- ✓ **Dimensions (w x d x h):** 42 x 55 x 23 cm (min. height without bottle tray)
- ✓ **Weight:** approx. 20 kg

GMP Features

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



Terminal Control

- ✓ A laptop (Win 10 Pro) with preinstalled controlling software Chromstar 7 is included
- ✓ Password protected access to software

Additional Module Options

- ➔ UV-detector upgrades: 2 channels or DAD
- ➔ All wetted stainless steel parts including pump head are available in PEEK
- ➔ Column selecting valve for up to four columns for measuring various tracer/nuclides with a single setup
- ➔ Refraction index (RI) detector

Synthra Quality Control

Product Description and Technical Specifications



Catalog No. 021i

✓ **Isocratic pump**

- Micro: Flow rate 0.001 – 2 mL/min (0 – 400 bar)
- Analytical: Flow rate 0.001 – 10 mL/min (0 – 400 bar)
- Pressure pulsation: typical < 1 bar or < 1 %
- One eluent solvent supply bottle

Catalog No. 021q

✓ **Quaternary gradient pump**

- Micro: Flow rate 0.001 – 2 mL/min (0 – 400 bar)
- Analytical: Flow rate 0.001 – 10 mL/min (0 – 400 bar)
- Pressure pulsation: typical < 1 bar or < 1%
- Gradient Range: 0.0 - 100.0 %, 4 channels
- Gradient Accuracy: < 0.25 %
- Active gradient mixing chamber
- Mixing volume: adjustable: 10 – 500 µL
- Four eluent solvent supply bottles