

HPLC-Scan

GMP compliant remote detection unit for TLC and HPLC



The HPLC-Scan is a flexible controlling unit designed for the remote detection of a wide range of radioisotopes with TLC and HPLC

Technology

The HPLC-Scan is a flexible and easy-to-use system for radioisotope detection of a wide range of radionuclides e.g. with HPLC. It can be controlled either by an application on a Bluetooth enabled handheld device or by PC.

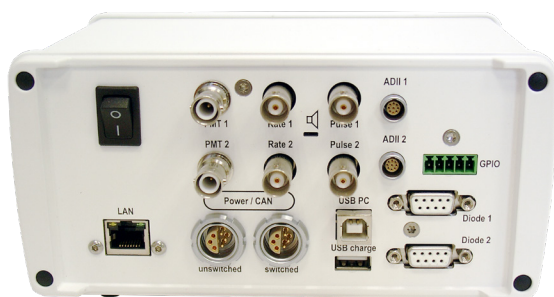
The HPLC-Scan connected with a detector can be used as a stand-alone device or for real time activity measurement in combination with any available HPLC systems.

Variable voltage output ranges (10 mV - 5 V) or pulse outputs (up to 500 kHz) of HPLC-Scan can be interfaced to existing chromatography data systems. The included RaPET Chromatography Software can be used to control the detection parameters and to record and analyze signals when used as stand alone device.

Technical Specifications

Dimension: 190 x 133 x 94 mm (W x D x H)

Weight: 1.5 kg



RaPET Chromatography Software

The RaPET Chromatography Software is a comprehensive chromatography data collection and analysis package. The evaluation software is very reliable and easy-to-use. It consists of a GMP database ensuring GMP compliant documentation and also adhering to 21 CFR part 11.

Features and Benefits

- Easy-to-use system with maximum flexibility
- Control via PC or Bluetooth with Android smartphones
- Compatible with all chromatography data systems by variation of output voltage and RaPET Chromatography Software
- Various lead shielded detectors and easily adjustable flow cells and holders for most types of applications
- Stand-alone device
- Capable of monitoring two detectors simultaneously
- Output analog and pulse to connect to any HPLC System
- Coincidence mode for use with PET Metabolite HPLC detector

Application examples

- Radiopharmaceutical analysis (^{99m}Tc , ^{111}In , ^{125}I , ^{123}I , ^{131}I , ^{90}Y)
- HPLC Analysis of ^{125}I and ^{32}P labeled compounds
- Monoclonal antibody labeling and analysis (^{125}I , ^{131}I , ^{90}Y)
- Protein and DNA labeling and analysis (^{32}P , ^{125}I)
- PET tracer analysis (^{68}Ga , ^{18}F , ^{11}C)

Detectors, Holders and Flow Cells

A variety of interchangeable detectors, holders and flow cells are available and provide the system with the flexibility to measure a wide range of isotopes and activities.

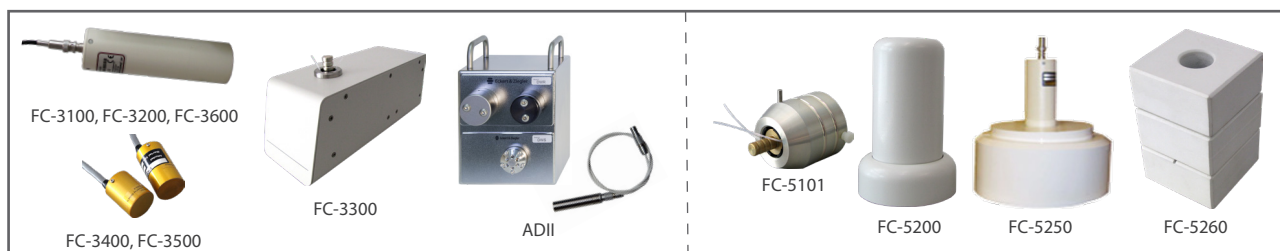
The HPLC-Scan can be connected to specially configured photomultipliers and/or PIN diode detectors to detect gamma, high energy positron and beta emitters at both high and low levels of activity. Background interference is reduced by fully variable energy window settings. Miniature detectors (diode and analog) can fit into small locations and can operate up to 12 feet away from the base unit, making shielding easier.

Depending on the nuclide and amount of activity the operator can optimize the setup of the flow cell.

HPLC-Scan

The following detectors, holders and flow cells are available:

Type	
FC-3100	Nal/PMT based detector is a low energy gamma (10 – 60 keV) detector used primarily for ¹²⁵ I
FC-3200	Nal/PMT based detector is a high energy gamma (60 - 1500 keV) detector used in most nuclear medicine applications
FC-3300	Nal/PMT based detector is a wide range gamma detector with built-in lead shielding to reduce background. It uses a well configuration which gives 4 pi counting geometry (> 20 keV)
FC-3400	PIN Diode detector is compact and easy to shield. It has a high count rate capability and low sensitivity to provide a linear range from 10 µCi to 1 Ci for most gamma emitters (>25 keV)
FC-3500	PIN Diode detector is compact and easy to shield. It uses a CsI crystal to provide greater sensitivity for gamma. With the shielding FC- 5260, the FC-3500 is recommended for quality control of high activity ¹⁸ F labeled compounds (> 100 keV)
FC-3600	Plastic Scintillator/PMT based detector is ideal for the detection of high energy beta and positron emitters such as ³² P, ⁹⁰ Y, ¹⁸ F, ¹¹ C, ¹³ N (> 30 keV)
ADII	CsI based detector for high energy gamma (> 100 keV) radiation, separate use or integrated into the Modular-Lab HPLC System
Holders	
FC-5101	Holder and flow-cell (for PMT)
FC-5102	Holder and flow-cell (for diode)
FC-5200	Lead shielded (0.5") holder and flow-cell; for use with high activity gammas (for PMT)
FC-5250	Heavily Shielded (2.0") lead holder and flow-cell; for use with PET isotopes (for PMT)
FC-5260	Heavily Shielded (2.0") lead holder and flow-cell; for use with PET isotopes (for diode)



Use your HPLC-Scan for HPLC and TLC application

