

# 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 with HPLC. It is controlled by an application on a Bluetooth enabled handheld device or through a PC-based application.

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 (10mV - 5V) or pulse outputs (up to 500 kHz) are used to connect the HPLC-SCAN to existing chromatography data systems or connect the HPLC-SCAN's digital TTL pulse signal with the RaPET Chromatography Software for maximum sensitivity, dynamic range and optional cGMP and 21 CFR Part 11 compliance.

## Technical Specifications

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

Weight: 1.5 kg

## Connections



## Features and Benefits

- Easy-to-use system with maximum flexibility
- Control via PC or via Bluetooth with Android smart phones
- 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
- One single model, independent and capable of monitoring two detectors simultaneously
- Output analog and pulse to connect to any HPLC System
- Add-on HPLC to complete your system
- Coincidence mode for use with PET Metabolite HPLC Detector

## Applications

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

## RaPET Chromatography Software

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

## 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:

Detector	FC-3100, FC-3200, FC-3600 (PMT-based radiodetectors)	FC-3300 (self-shielded radiodetector)	FC-3400, FC-3500 (diode detectors)	ADII (separate or integrated in tungsten holder of Modular-Lab HPLC Module)
Shields, Holders and flow cells	FC5200, FC-5250, FC-5101	FC-5301 (holder)	FC-5260	

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## Detectors

The HPLC-SCAN uses specially configured photomultipliers and/or PIN diode detectors to detect gamma, positron, and high energy beta emitters at both high and low levels of activity. Background interference is reduced with 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.

FC-3100	Na/I PMT based detector is a low energy gamma(10 – 60 keV) detector used primarily for <sup>125</sup> I.
FC-3200	Na/I PMT based detector is a high energy gamma (> 60 keV) detector used in most nuclear medicine applications.
FC-3300	NaI/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.
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.
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 <sup>18</sup> F labeled compounds.
FC-3600	Plastic Scintillator/PMT based detector is ideal for the detection of high energy betas and positron-emitters such as <sup>32</sup> P, <sup>90</sup> Y, <sup>18</sup> F, <sup>11</sup> C, <sup>13</sup> N.
ADII	Separate use or integrated into the Modular-Lab HPLC System

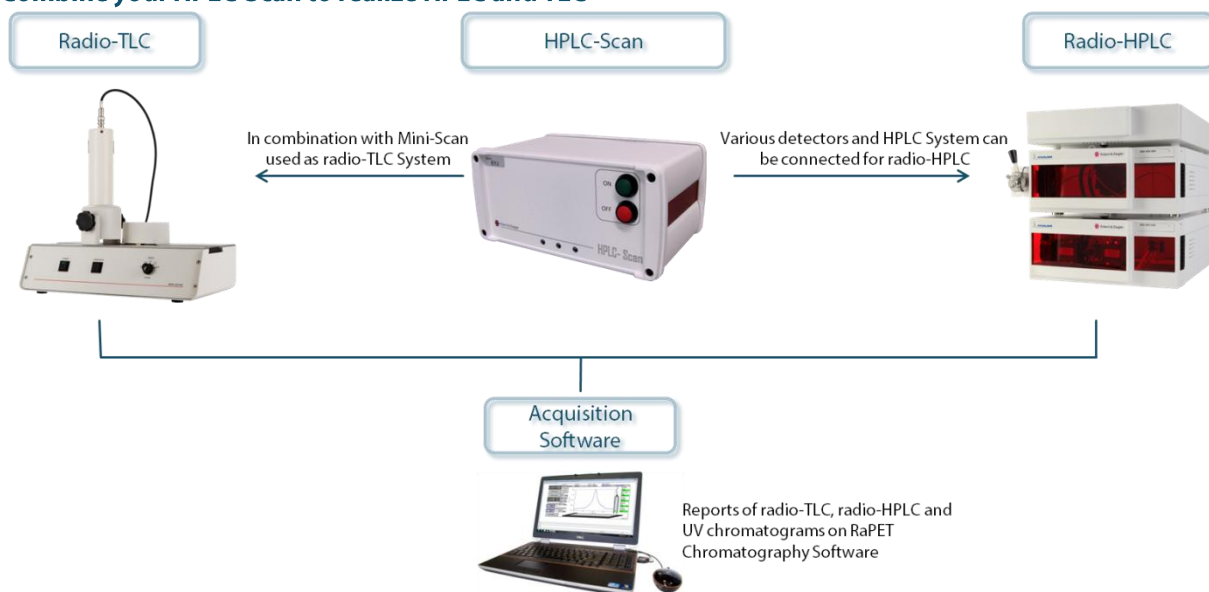
## HOLDERS

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 assembly; for use with high activity PET isotopes. (for diode)
FC-5101	Holder and flow-cell (FC-5102) (for diode)

## Flow Cells

The flow cells are made of standard Teflon tubing and are disposable. Sensitivity is optimized with adjustable flow cell volumes, which can be set by the user.

## Combine your HPLC-Scan to realize HPLC and TLC



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