TLC-Scan

GMP compliant radio-TLC scanner



TLC-Scan is a GMP compliant and versatile, costefficient, radio-TLC scanner for the reliable detection of radioisotopes on narrow strips and plates

Technology

TLC-Scan is a versatile TLC scanner for the reliable detection of radioisotopes on narrow strips and plates. The system is ideal for routine quality control of ⁶⁸Ga, [¹⁸F]FDG, ^{99m}Tc and ¹²³I radiopharmaceuticals. It can use any two detectors (PMT, diode)

The TLC-Scan consists of a moving stage and a PMT-based detector. TLC-Scan is also a radioisotope-HPLC detection system, which is compatible with all HPLC systems. TLC-Scan uses various interchangeable scintillator / photomultiplier detectors for measurements of most isotopes including 68 Ga, 18 F, 125 I, 131 I, 99m Tc, and 111 In. Several scan speeds allow detectors to measure a wide range of activities from 10 nCi to 100 μ Ci (0.00037 - 3.7 MBq) depending on the detector choice. Analog and digital signals are provided for interfacing TLC-Scan with existing chromatography data systems. *RaPET Chromatography Software* can also be used for your data collection and report generation requirements.

Features and Benefits

- Easy-to-use system with maximum flexibility, automatic positioning system
- Control via PC or via Bluetooth with Android-based devices
- Compatible with existing chromatography systems utilizing analog output of the TLC-Scan.
- Standalone use also possible with RaPET Chromatography Software
- Wide range of detectors to suit many applications
- Capable of monitoring two detectors simultaneously (radio-HPLC mode)
- Variable scan speeds
- Easy system set-up and maintenance
- All parameters, such as threshold (for background, energy window, lower and upper discrimination), high voltage, integration measurement time and measurement range are adjustable and software controllable

Applications

- Routine quality control of ⁶⁸Ga, [¹⁸F]FDG, ^{99m}Tc, ¹²³I and other radiopharmaceuticals
- TLC of radiopharmaceuticals labeled with gamma, beta and positron emitters
- In-process TLC analysis of reaction mixtures

Technical Specifications

Dimension: $356 \times 197 \times 445 \text{ mm}$ (W x D x H)

Weight: 11.9kg

Inputs

Up to two PMT-based radiodetectors or up to two diode radiodetectors and two analog channels

Outputs

Up to two analog rate signals (ranges of 10mV, 100mV, 1V, 5V) with 12-bit resolution, up to two TTL pulse outputs



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

Various types of detectors are available for the TLC-Scan: a standard Na/l crystal, a plastic scintillator, diode and analog detector. These interchangeable detectors provide the system with the flexibility to measure a wide range of isotopes and activities.

- The FC-3100 Na/I PMT based detector is a low energy gamma (10 60 keV) detector used primarily for ¹²⁵I.
- The FC-3200 Na/I PMT based detector is a high energy gamma (>60 keV) detector used in most nuclear medicine applications.
- The FC-3600 Plastic Scintillator/PMT based detector is ideal for the detection of high energy beta and positron emitters such as ¹⁸F, ¹¹C, ³²P, ⁹⁰Y and others
- Diode (with/without amplification) and analog detector





Optional: TLC-Scan including Multi Channel Analyzer

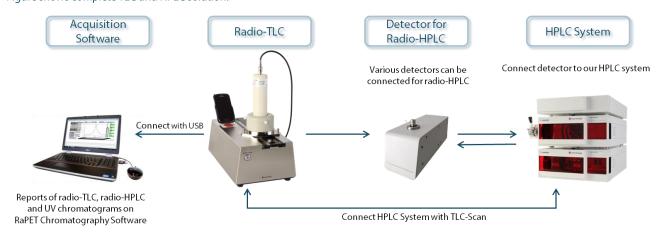
As another option Eckert & Ziegler offers the TLC-Scan equipped with a Multi Channel Analyzer (MCA) and the appropriate Na/l-detector with spectroscopy quality. An extra lead shielding will be installed inside the device.

Upgrade your TLC-Scan to a radio-HPLC detection system

The TLC-scan can drive a TLC detector as well as a radio-HPLC detector simultaneously. A combination of diode and PMT detectors and any HPLC System can be connected to the TLC-Scan for radio-HPLC. So you can easily upgrade your TLC-Scan to a complete TLC and HPLC solution.

Check our HPLC-Scan fact sheet for learn more about radio-HPLC detectors, detector holders and flow cells.

Figure shows complete TLC and HPLC solution:



Eckert & Ziegler Eurotope GmbH

Robert-Rössle-Strasse 10 13125 Berlin Germany

Phone: +49 30 941084 197 Fax: +49 30 941084 470

eurotope@ezag.de www.ezag.com/radiopharma Your contact in USA & Canada: **Eckert & Ziegler Radiopharma, Inc.**

63 South Street, Suite #110 Hopkinton MA 01748 USA

Phone: + 1 508 497 0060 Fax: + 1 508 497 0061

eurotope@ezag.com www.ezag.com/radiopharma