



Innovator In Spectroscopy Equipment

# RTL2118



## RADIOACTIVITY TLC SCANNER MODEL RTL2118

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CATALOG



MEDICAL

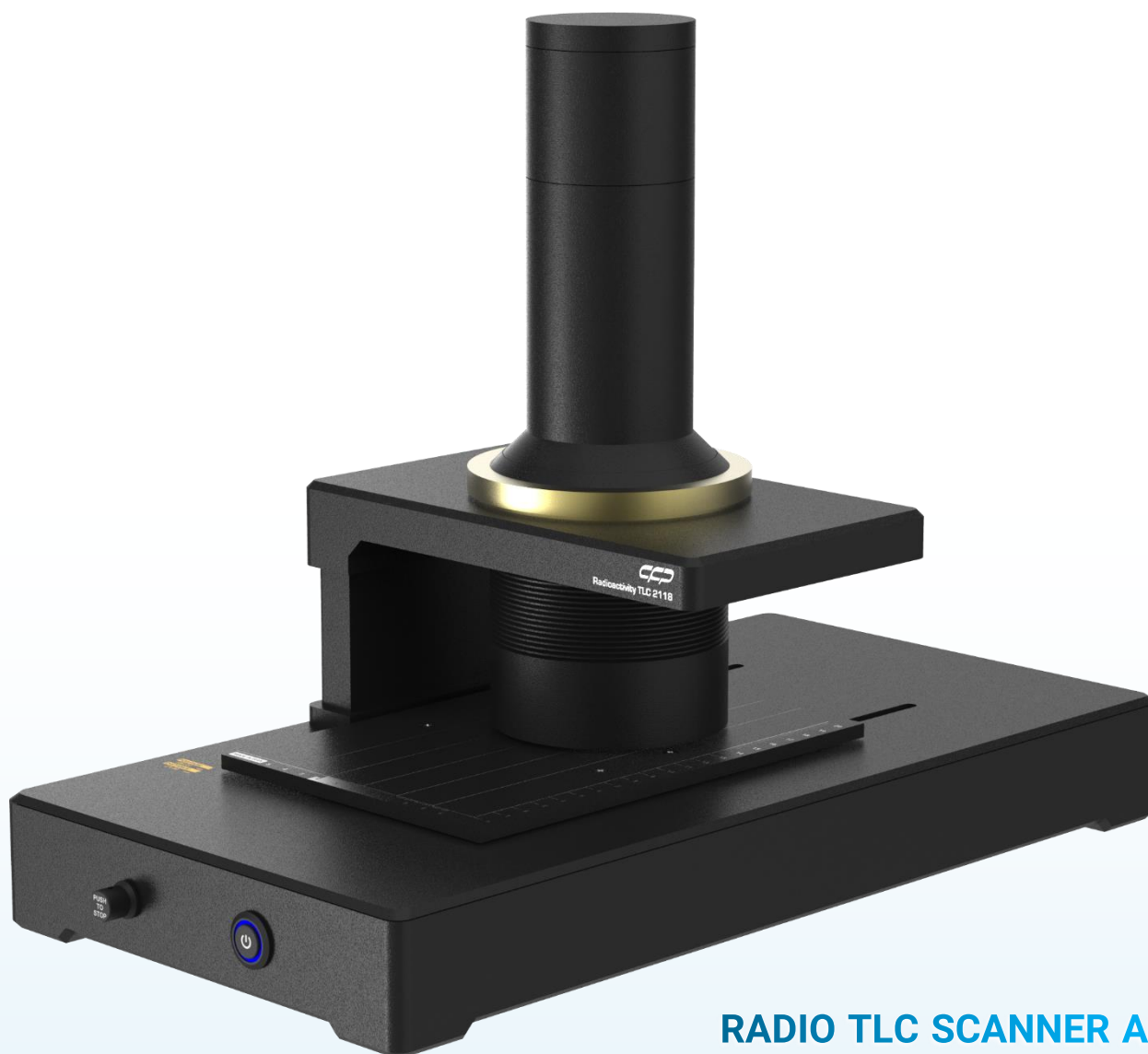


FREE DOWNLOAD

## RADIOACTIVITY TLC SCANNER MODEL RTL2118

### Features

- Optional beta probe for PET applications
- One trace scan 25 x 200 mm
- Variable scan speeds from 0.1-60 (mm/sec)
- Protocol-driven software package for QC, operation and calibration with live display on screen
- Supports all data extraction and reanalysis of stored data
- Integrated digital MCA with 4096 Channel resolution with automatic decay correction and peak integration
- Daily quality control of radiopharmaceuticals used in Nuclear Medicine procedures
- Full detector and data acquisition control via application software
- Spectroscopic analysis of radiopharmaceutical purity
- very high counting rate and dead time correction



**RADIO TLC SCANNER AND  
SPECTROSCOPY IN ONE!**

## Description

The RTLC2118 evaluates the radiochemical purity of specific radiopharmaceuticals used in nuclear medicine procedures. The integrated digital MCA and the fully programmable motor control result in a system that is readily driven by protocol driven application software. This makes it straightforward to implement the different analysis parameters required by each radiopharmaceutical or procedure. The RTLC2118 is well suited to the busy Nuclear Medicine Department with many procedures to perform.

RTLC2118 comprises a NaI(Tl) detector in the standard package used in SPECT applications and comes with an optional beta detector that makes it suitable for PET applications.

The standard software provides a graphical user interface for TLC scan, gamma-ray spectroscopy, detector control, data acquisition, QA and database management. The provided factory programmed protocols may be supplemented by user defined protocols. The protocols provide automatic control of the detector scan, the acquisition as well as graphical display and analysis. QA is assured by the quality control procedure and trending analysis of the QA data as a function of time. The database option supports the extraction and re-analysis of all stored data.

## Specifications

### Inputs/outputs

Inputs

Knob, USB

Outputs

Display, USB

### Controls

knob

This knob provides the user with manual control over the device slider.

Power Push button

Push to turn device ON

Hold on for 3 sec to turn device OFF (long press)

While device ON push key to change mode (short press)

### Display

OLED, Full color

0.96", 96x64 pixels,

### Performance

Speed

0.1-60mm/sec

Travel length

200mm

Strip size

30 x 200mm

Collimators

Type1: 0 - 60keV, Width: 2mm

Type2: 60 - 300keV - Width: 3mm

Type3: 300 to 1500keV - Width:3mm

### Detector

NaI(Tl)

40mm x 40mm

PVT - OPTIONAL

0.25mm

### Data Acquisition

Processor

FPGA technology with Arm9 32 bit 200MHz

Watchdog

Built in

### Measurement/Spectrum

High Voltage

0 - 1500V (DAC 12bit) 0.2mA

Energy channel (Selective by Admin)

From 0 to 1024 keV

From 0 to 2048 keV

From 0 to 3072 keV

From 0 to 4096 keV

Energy calibration

Non-linear empirical function or linear Calibration (polynomial fit)

Spatial Rol

Radiopharmaceuticals (arbitrary number of Rol)

Impurity (arbitrary number of Rol)

Background (one Rol)

### ADC

Channels

12bit in 4096CH @120Mhz FRQ

Conversion time

200nsec with

8.3nsec time interval

## Application

- Radiochemical purity measurements
- Online inspection
- Laboratory and quality control
- PET and SPECT quality control

## Electrical and Mechanical

Power required

AC to DC adaptor 48V 1.25A

Physical

Dimensions 466mm x 230mm x 357mm (LxWxH)

Weight 12.780kg

Storage temperature 0°C to 50°C

Operating temperature 10°C to 45°C.

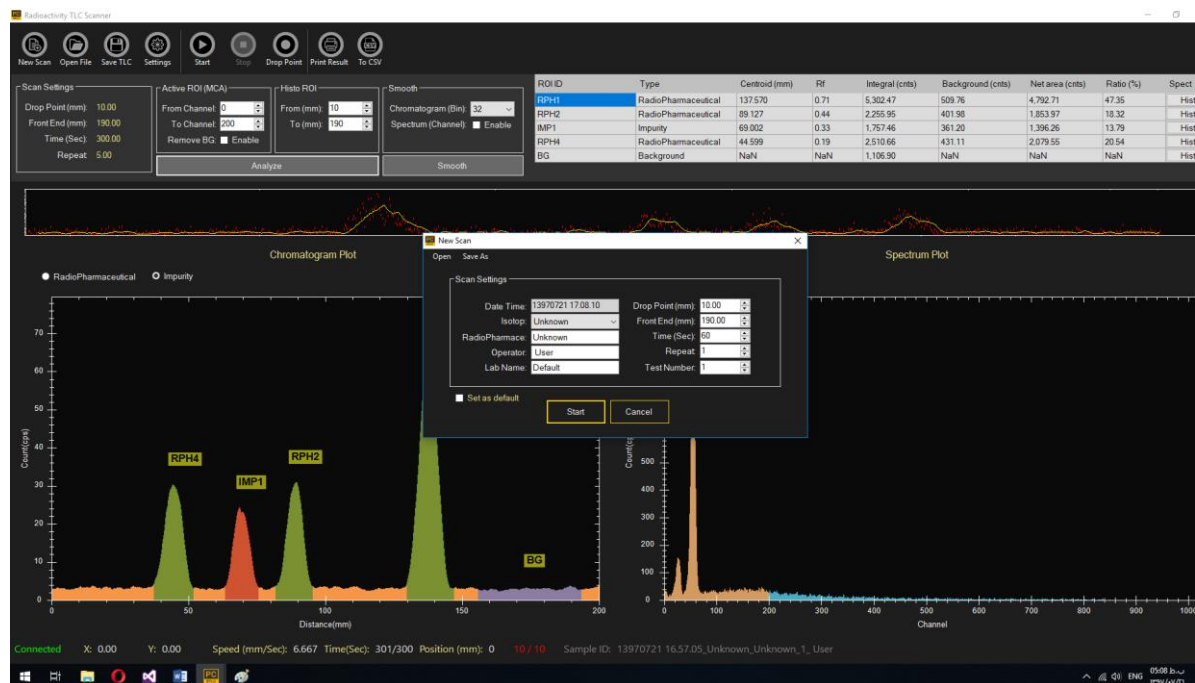
## Software

Online setting, Experimental Setup window, Scan area configure, Multi-channel analyzer (TYP: 1024CH)

Analysis result, ROI selecting

Save all results to CSV format

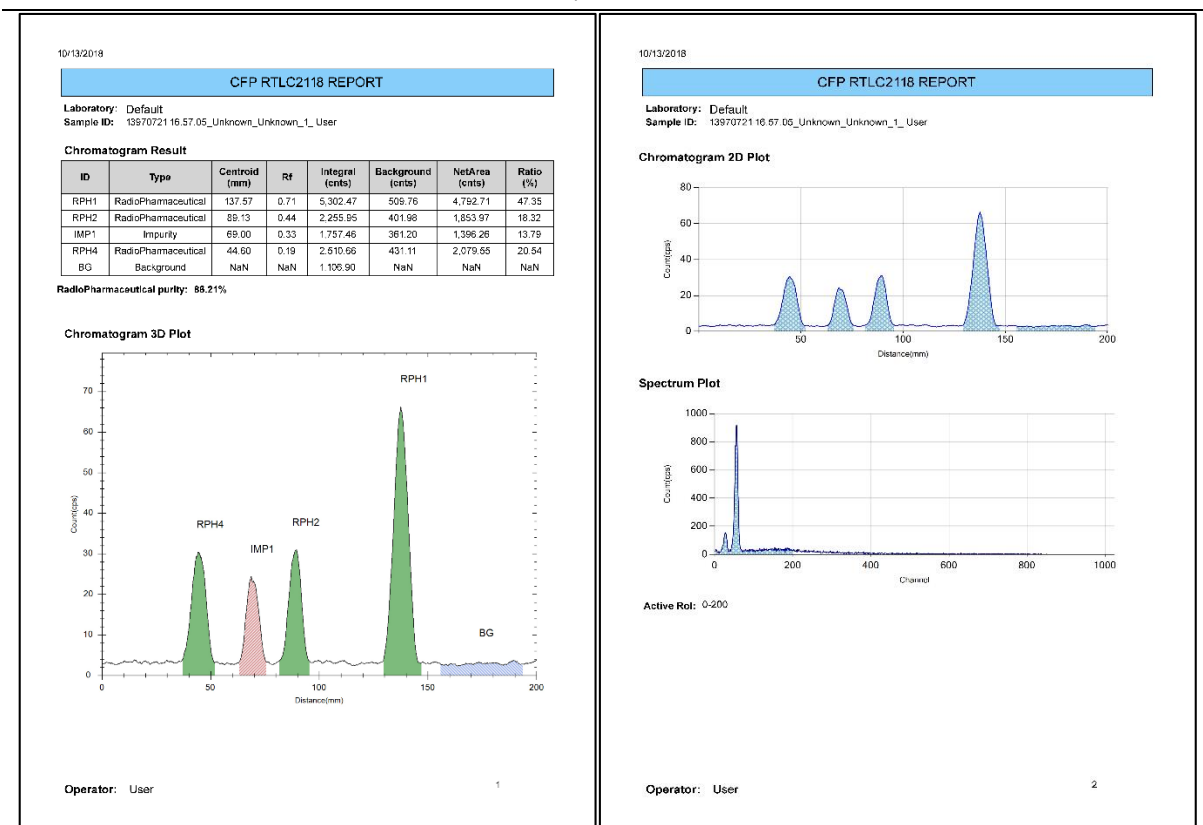
Report panel (Color, Gray, Monochromic), Chromatogram result, Chromatogram 3d and 2d plot result, Spectrum plot result



Experiment setup window








Data acquisition window





Typical Software report

## Ordering info

### Standard package includes

Part #	Image	Description
RTLC2118 main		Includes the main body of device (Detection system, linear stage, integrated display)
ACCE2118001		5pin LEMO to 5pin LEMO connector for Main to detector connection.
ACCE2118002		LEMO Cable to USB for PC connection
ACCE2118003		DC Power adaptor 48V 1.25A
ACCE2118004		CD User guide (1 Pack)

### Optional accessories and services

Part #	Image	Description
ACCE2118005		Beta probe (PVT 0.25mm)
ACCE2118006		installation
ACCE2118007		Training
ACCE2118008		Hard case with foam insert



Innovator in Spectroscopy Equipment



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