LGS2515-2.5"

Windows

LAB GAMMA SPECTROSCOPT SYSTEM MODEL LGS2515-2.5"

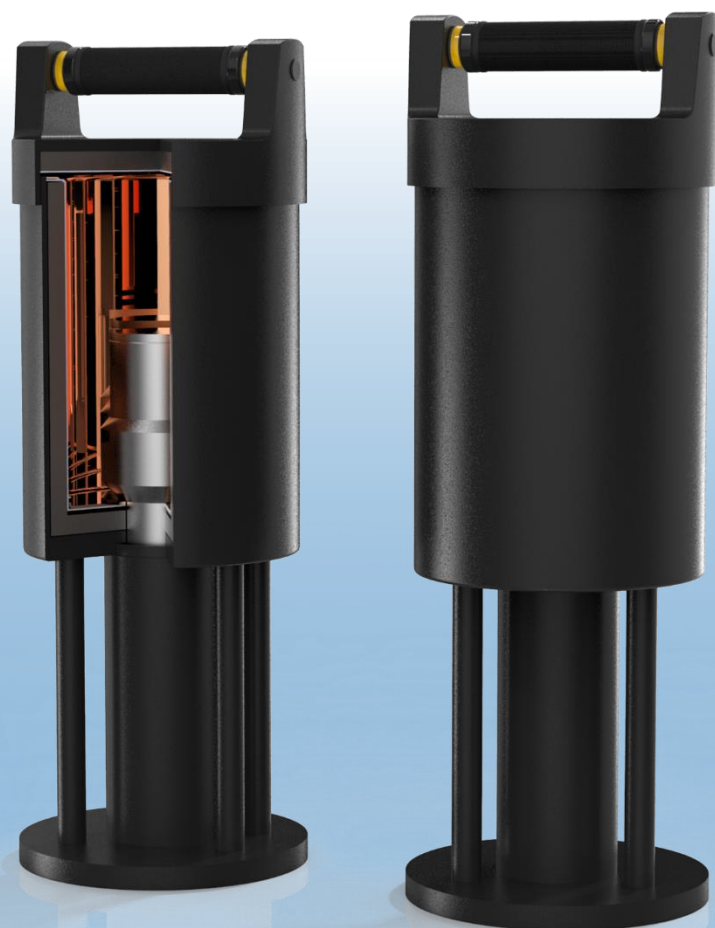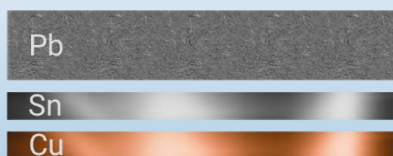CATALOG   SPECTROMETER   FREE DOWNLOAD

α β γ χ
SPECT

LAB GAMMA SPECTROSCOPT SYSTEM
MODEL LGS2515-2.5"

Features

- Efficient 2.5" NaI(Tl) scintillator probes
- Closed measuring chamber with scintillation detector
- 4 Different energy ranges (adjustable digital gain)
- 4096 channel s spectrum presentation
- Supports all data extraction and reanalysis data

- Simultaneous and separate measurement
- High sensitivity and uniform response
- Low limits of detection and decision
- Documentation of measured values
- Wide temperature range

FAST AND ACCURATE GAMMA SPECTROSCOPY

BASED ON CUSTOMIZED SHIELD DESIGN

X- and Gamma-Rays
Low Background Shield

Pb
Sn
Cu

LGS2515
Lab Gamma Spectrometer

LGS MODEL 2515
SN: 180405 - 001
MADE IN IRAN

Description

LGS2515-2.5" is a well-shielded gamma activity measurement system offering gamma spectrum calculations in the sample. The system can be utilized in various applications including environmental analysis, food samples and nuclear medicine. The device is equipped with a 2.5" NaI(Tl) detector which leads to impressively high spectrum resolution. The holder considered for the sample comes with two versions. In the first version, the shield compromises 3 layers including copper, tin and lead from interior to exterior, respectively. The second version is similar while tin layer has been excluded. The overall dimension of the system is 562.4mm height and 200mm diameter while the cavity for sample holder has diameter of 148mm and depth of 219mm. Using modern digital signal processing algorithms, the usbBase can accurately detect the pulses corresponding to gamma radiation with low dead time. It is easy to operate and provides quick and reliable measurement results. The instrument is ideally suited for nuclide-specific activity measurements in the radionuclide laboratory. The measurement electronics is a modular designed system including a high voltage unit with preamplifier and an ADC for the acquisition of spectra. The measurement electronics LGS2515-2.5" is operated via PC software. This allows very intuitive user guidance. Pulse height spectra can be depicted graphically and evaluated. Several service functions are available including background measurement, energy calibration and spectrum recording.

Specifications

Inputs/outputs
Inputs
USB
Outputs
USB
Shield Properties
Martials and Thickness
Copper, Tin, Lead (version 1) – 2mm,1mm,13mm respectively Copper, Lead (version 2) – 2mm,13mm respectively
Cavity
219mm x 148mm (Depth x Diameter)
Background Measurement (Background is measured with closed shield opening)
Gamma
60CPS (with shield)
Detector
Gamma Detector
NaI(Tl), 2.5"
PMT
14-pin 10-stage PMTs
Data Acquisition and Analysis
OS Requirement
Windows 7 or higher versions

Software
CFP-DMCA software
Measurement/Spectrum
High Voltage
0-2000V, Positive, 12 Bit resolution
Energy Calibration
Linear calibration
ROI Selection
4 ROIs to select on store
Spectrum Type
2 simultaneous cumulative spectrums
ADC
Channels
12bit in 4096CH @120Mhz FRQ
Conversion time
200nsec with
8.3nsec time interval
Digital Signal Processing
12-bit and 80 MHz ADC
Software selectable coarse gain: (x1 to 150x) in 15 step
Software selectable fine gain: (0 - 2x) in 65536 step
Integration time filter for the energy calculation with software adjustable rise time in the range 0 to 0.819ms @80Mhz in 0-65536 step
Trigger threshold software adjustment (0 to 100% scale) in 1024 step
Software fine tuning of the Pole-Zero cancellation
Software gain stabilization
Pile-up rejection and Live Time correction
Baseline restorer with programmable averaging

Application

- Nuclear medicine
- In-vitro test
- Radio-immunoassay and analysis of environmental samples
- Food samples inspection
- Mining and mineral analysis

Electrical and Mechanical

Power required	
USB port - DC – 5V- 200mA (1W)	
Physical	
Dimensions	562.4mmx200mm (Height x Diameter)
Weight	36.40kg (3 Layers) 35.15kg (2 Layers)
Storage temperature	0°C to 50°C
Operating temperature	10°C to 45°C.

Software

DMCA software containing fast access toolbar, menu bar, and different panels including new gamma histogram, gamma trace and state info.
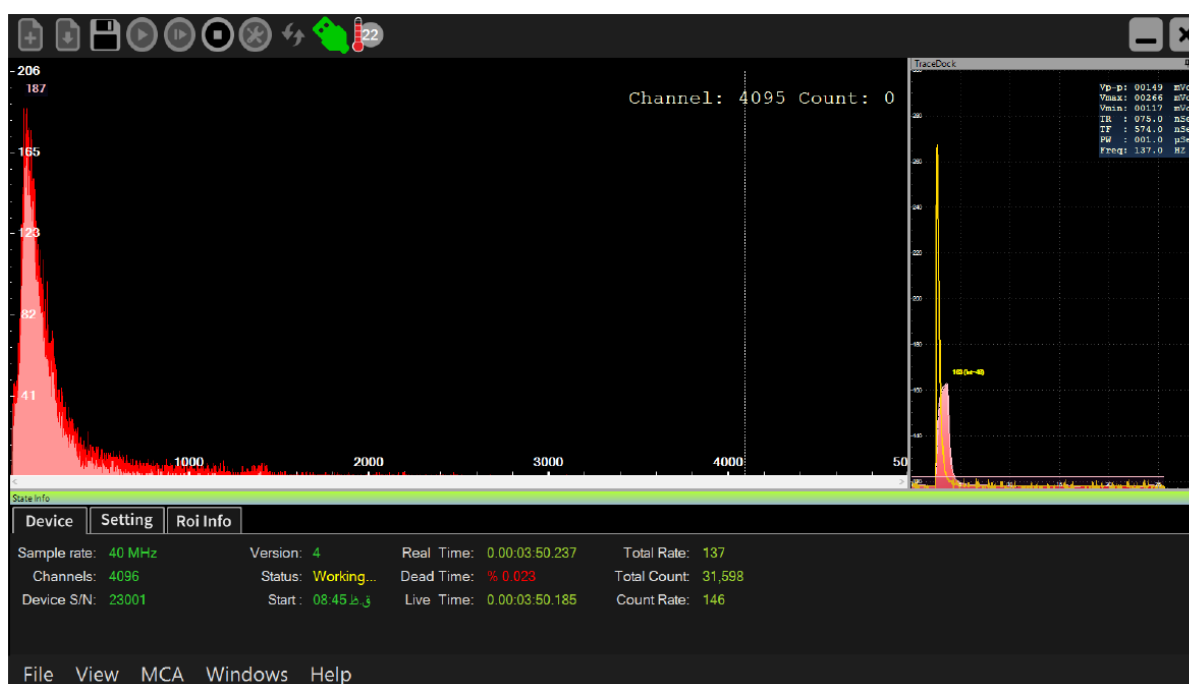
Fast access toolbar provide several functionalities usually used by user.

New gamma histogram panel represents the gamma spectrum in real-time manner.

Gamma trace panel shows the gamma pulses sensed by detector.

State info panel shows some information of detector parameters along with real time measurement results.

Menu bar shows the total command needed throughout the device functioning.

Software main window

Ordering info

Standard package includes Version 1 (3 Layers Shield)

Part #	Image	Description
LGS2515-2.5" main (Ver1)		Includes the main body of device (Detection system, linear stage, integrated display)
ACCE2515001-2.5"		CD User guide (1 Pack)

Standard package includes Version 2 (2 Layers Shield)

Part #	Image	Description
LGS2515-2.5" main (Ver2)		Includes the main body of device (Detection system, linear stage, integrated display)
ACCE2515001-2.5"		CD User guide (1 Pack)

Optional accessories and services

Part #	Image	Description
ACCE2515002-2.5"		installation
ACCE2515003-2.5"		Training
ACCE2515004-2.5"		Hard case with foam insert

CFP

Innovator in Spectroscopy Equipment