

BrightSpec

Digital Multichannel Analyzers
for Gamma-Ray Spectrometry



Key Features

A powerful and novel digital tube-based or stand-alone Multi-Channel Analyzer

Includes everything needed to do spectrometry using standard scintillators detectors; preAmplifier, High Voltage Power supply, Digital Processor and MCA

Compact size

Supported scintillator types
NaI(Tl), CsI, Lanthanum halides (LaCl₃ (Ce) ,LaBr₃(Ce), CeBr₃, HgI with PMT and SiPM

Two acquisition modes:
Pulse-Height Analysis (PHA)
Multi-Channel Scaling (MCS)

Advanced, miniature HV power supply, provides High Voltage bias of 0 to 1500 Volts in steps of 1/4096 with Low ripple, Low electronic noise and Low power consumption

MCA with wide range of channels selection, 256, 512, 1024, 2048 or 4096 channels

Full DSP control; FlatTop and RiseTime settings, Digital Base-Line Restorer (BLR) and Digital Pile-Up Rejection (PUR)

Powered via USB or Power-over-Ethernet

Programming libraries

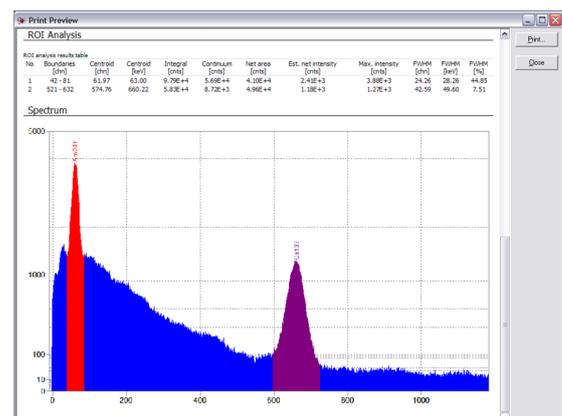
runs with 32 and 64-bit MS Windows XP, Vista, 7, 8 and 10

Basic Spectroscopy software

The Basic Acquisition and Spectrometry Software can be used to connect to any of our Multi-Channel Analyzers in order to acquire data in PHA or MCS modes. The application also allows to perform basic spectral data processing and analysis.

Main features

- ◆ Control of the operation of the bMCA device
- ◆ Setup of acquisition parameters
- ◆ Data acquisition in Pulse Height Analysis (PHA) and Multi-Channel Scaling (MCS) modes
- ◆ Visualization of the energy spectrum
- ◆ Peak search and energy calibration
- ◆ ROI-based spectrum analysis
- ◆ Saving of acquired spectra into files in ASCII format
- ◆ Generation of reports
- ◆ Creation and use of nuclide libraries
- ◆ Possibility of calling an external application for further spectrum processing at the click of a button



Models

specifications



bMCA/u

Digital Tube based MCA with USB type miniB interface to PC. Height 60 mm, diameter 55 mm, weight 120 grams.



bMCA/E

Digital Tube based MCA with Power over Ethernet technology (PoE, 802.11af) Height 75 mm, diameter 55 mm, weight 200 grams



Topaz-Pico

Stand alone digital MCA Compact MCA with USB 2.0 in Aluminum Case. One LEMO (Type ERA 0S 403 CLL) connector for both detector HV Bias and Signal. Weight 150 Grams, Optional TTL counter input



TOPAZ-Pico BNC

A version of the compact Topaz-Pico Multi-Channel Analyzer, where the LEMO connectors have been replaced by standard BNC ones.

PHA acquisition mode with memory of 256, 512, 1024, 2048 and maximum of 4096 channels

Gain and Fine Gain settings with amplification factors of 1, 2, 4 and 8. Fine Gain from 1 to 2 in steps of 1/4096

PHA acquisition presets on; live Time, real Time, to Counts on a ROI or combination of both - time or ROI counts

Upper and Lower Level discriminator settings given in channels

MCS acquisition mode with memory of 256, 512, 1024, 2048 and maximum of 4096 channels Dwell time from 0.1 sec to "count-forever"

Easy to setup via stored ROIs or ROIs marked in the PHA mode

Digital Settings

Rise Time: from 0.1 to 12 msec in steps of 0.2 msec Flat Top: from 0.1 to 8.0 in steps of 0.1 msec

Threshold: 1 to 255

Digital Base Line Restorer (BLR)

Pile Up Rejector (PUR)

Miniature HV power supply embedded into the MCA assembly Maximum Voltage: 0 to 1 500 Volts in 4096 steps

Red color LED for detector high voltage, Yellow color LED for incoming count rate (ICR) , Green color LED for power and communication

♦ industrial temperature range: -40 ° C to +85 °C.

♦ all devices are CE compliant

♦ devices are supplied with basic software

Related products



Scintillation Detectors



Radioactive check & reference sources



Germanium Spectrometry Systems



Hidex Automatic Gamma-counter



CAEN GammaStream MCA



Hexagon Dual Independent 32k Digital MCA with HV and pre-amplifier power supply

Measuring Tools for Radiation

MetorX B.V. are a specialized science and technology partner in the field of nuclear instrumentation. We are strongly committed to R&D and focused to innovate and simplify "Measuring Tools for Radiation".

In corporation with our customers and partners, we create and deliver user friendly, clever and dedicated tools.

MetorX facility in Goedereede

MetorX is based on the island of Goeree-Overflakkee in the South west of The Netherlands. Goedereede is a special place on the island. This historic town was of big importance during the Middle Ages.

The name Goedereede also means "safe harbor / anchorage."

MetorX sponsors "Kunstwereld"

"Kunstwereld" is a unique project, made up of a group artist with a mental disability creating live-



ly pieces of art. MetorX is sponsoring the activities. All of our corporate gifts are designed and created by "Kunstwereld".

MetorX B.V.

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