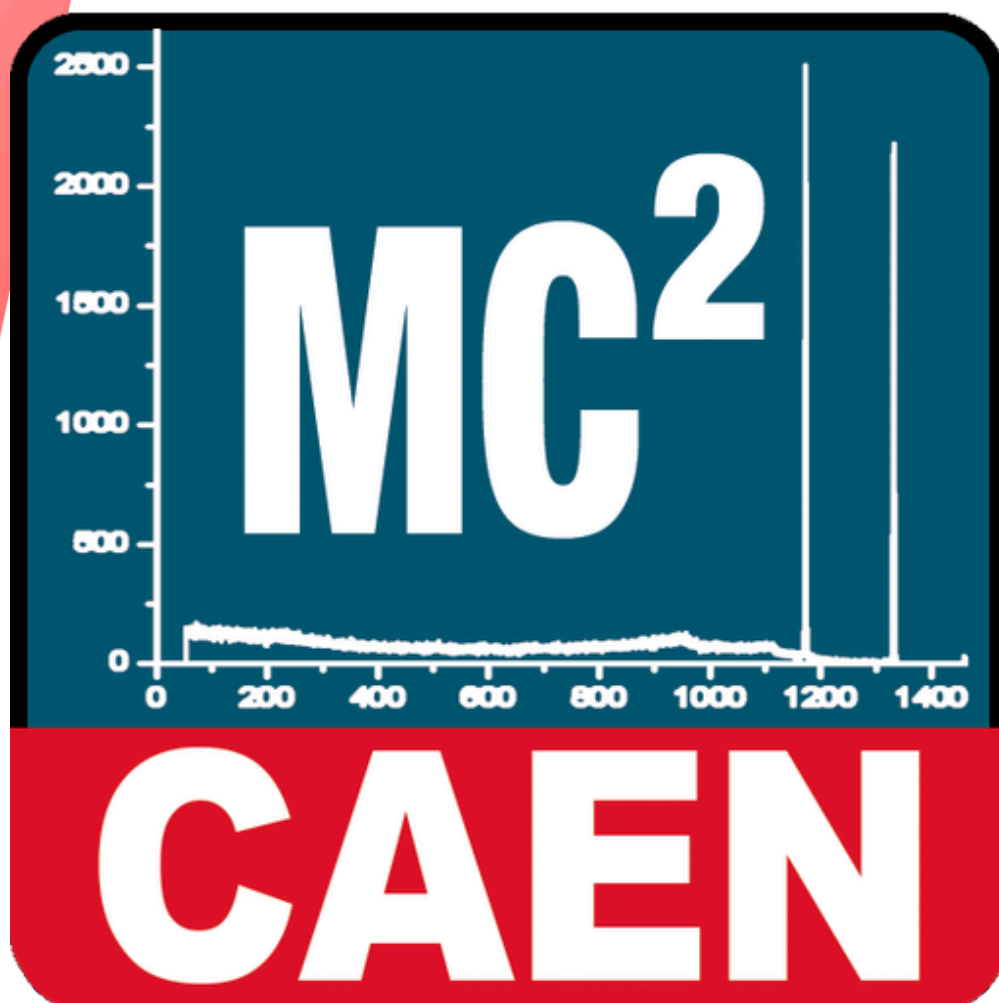


## MC<sup>2</sup>Analyzer

**Graphical software  
tool for digitizers  
running DPP-PHA  
firmware**



## Features

- Designed for Hexagon, DT5770 and Gamma Stream
- Trapezoidal filter replacing shaping amplifier and peak sensing ADC
- Online baseline restoration and ballistic effect correction
- Online pile-up correction for live-time measurement
- PHA and time-stamped list mode available
- Full setting of all the relevant DPP-PHA parameters and power supplies for Hexagon and Gamma stream
- Complete simultaneous control of multiple boards
- Basic mathematical analysis on collected spectra (peak search, background subtraction, peak fitting, etc.)
- Provides Energy, Time Stamp lists and histograms in ASCII and ANSI N42.42 format (energy spectra for D5770 only)

## Description

**MC<sup>2</sup>Analyzer** is a software specifically designed to manage **Hexagon, DT5770** and **Gamma Stream**. The DPP-PHA firmware implements a digital trapezoidal filter on the input pulse, which replaces the traditional analog chain of shaping amplifier and peak sensing ADC. The MCA is therefore directly connected to the charge sensitive preamplifier, with no need of additional devices. The PHA algorithm is able to perform online baseline restoration, ballistic effect corrections, and to manage the pile-up for the live time information. PHA and time-stamped list acquisition modes are available.

MC<sup>2</sup>Analyzer software allows the user to program the relevant **DPP-PHA** parameters, to manage the HV channels configuration to collect the spectra and perform basic mathematical analysis, like energy calibration, peak search, background subtraction, peak fitting, etc.

The software is designed with multi-channel and multi-board capabilities: it can handle several boards and manage the data acquisition from each of them at the same time.

**Supported Operating Systems:** Windows

**Language:** C#

**Supported Products:** Hexagon, Gamma Stream and DT5770

**Supported Comm. Interface:** USB and Ethernet

### Applications

- Nuclear spectroscopy
- HPGe, silicon drift, silicon strip detectors
- Slow scintillation detectors like NaI(Tl)
- Anti-Compton shielding
- Homeland security
- Environmental survey
- Ion beam analysis
- Nuclear medicine

## Related Firmware

### DPP-PHA



Digital Pulse Processing for the Pulse Height Analysis

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## Related Products

### Gamma stream



Digital MCA Tube Base for Gamma-Ray Spectroscopy

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### Hexagon



Digital MCA

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### DT5770



1 Channel Digital MCA

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