

Display Cursor: Checking on this box displays a cursor on the screen. Information regarding the energy, counts and the position of the cursor (channel no.) is displayed on screen besides the cursor.

Zoom In: Select the zoom in option and a window appears at the top displaying the area currently zoomed. Drag the mouse to select the rectangle of interest.

Zoom Out: Exits the zoom mode.

Grid View: Spectrum view displays the entire spectrum & peaks information. ROI view displays information related to select ROI only.

PHA Mode features :

- Exp. Time : The time for acquisition in seconds (for PHA and MCS both)
- Timer Mode: Live / clock mode (for PHA only) (Default: Live).
- Conversion Gain: This is used to set conversion gain of the MCA. (for PHA only) (Default : 8K)(256 channels-8K channels)

LLD (volts) : This is used to set lower discrimination level of the MCA (Set range : 0.1 to 10 volts)

- ULD (volts) : This is used to set upper level discrimination level of the MCA (set range : 0.1 to 10 volts)
- Baseline (volts): This is used to set baseline of the MCA (range: -2V to +2V volts).

Advantages:

The USB-MCA is designed with state of art technologies to meet the stringent requirements of nuclear instrumentation and hence offers many distinct advantages including the following:

- Excellent MCA performance in terms of resolution, DNL, etc.
- Universal connectivity to a wide range of PCs and notebook computers.
- Unlike ISA/PCI cards, it stands outside a PC.
- Simple to install, operate and handle.
- Low power operation, operates with USB bus power only.

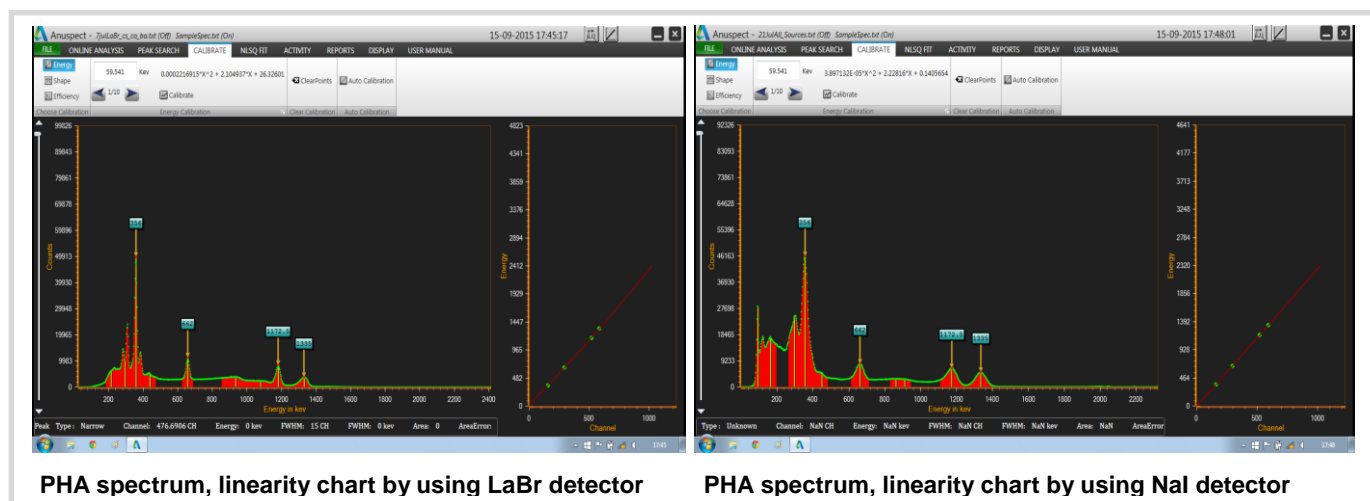
PC Configuration Requirements :

- Operating system-Windows XP with SP3 or higher
- CPU-Higher than Pentium-4
- Memory -2GB RAM
- Graphics Hardware-DirectX9.0C or higher (optional).

Applications:

The USB-MCA is useful for high resolution pulse height analysis (up to 8K channels) and high count rate systems (with a typical dead time of 7µsec maximum). The hardware with associated software installed in a pc makes state of art Multi-Channel Analyzer system. It is useful for high resolution X-ray and gamma ray spectrometry work in following areas:

- Isotope research
- Nuclear reactors
- Accelerators
- Universities
- Other R&D.



PHA spectrum, linearity chart by using LaBr detector

PHA spectrum, linearity chart by using NaI detector

Important Note: 8K MCA (USB) module and AnuSpect are offered by Nucleonix systems, based on the technology received from B.A.R.C., Mumbai.