



# GammaSpectacular

B E E R E S E A R C H P T Y L T D



- Adjustable voltage 500 - 2000V
- Adjustable gain
- Adjustable pulse shape
- One or two wire detectors
- Analogue output
- 48 to 384 kHz sampling
- Up to 2500 cps.
- USB Powered

## GS-PRO-V5

USB GAMMA SPECTROMETER

## GS-PRO-V5 USB Gamma Spectrometer

The new GS-PRO-V5 is the latest Gammaspectacular, it's improved design draws on all the experience and feedback received from over 2000 customers. The GS-PRO-5 comes in a high quality machined aluminium enclosure and is significantly smaller measuring only 100 x 100 x 35 mm. There have been several improvements to the circuit, but the overall functionality remains the same.

The GS-PRO-V5 runs on free software and simply connects it to any PC or Mac\* USB port and works with any brand of PMT based scintillation detector for spectrometry or any geiger counter for simple counting experiments.

Built in audio codec (ADC), eliminating the need for external audio connection to the PC sound card, this enhancement has significantly improved the signal to noise ratio and ease of use.

SHV connector for the high voltage bias and BNC connector for the optional signal input, making it compatible with most brands of detectors.

Control over preamplifier pulse gain and shape via separate trimmer potentiometers accessible without opening the enclosure, very convenient for optimisation of the dynamic range.

New custom designed enclosure allowing for future upgrades and modifications

The multi function audio jack can be assigned as an input or an output making it easy to connect analogue measuring instruments.

The audio jack right channel functions as an input, making it possible to connect two units together with a stereo crossover cable for coincidence counting.

The GS-PRO-V is the first model to come with USB type-C connector.

### Software

The GS-PRO-V5 works with several open source programs, each having unique features. Check out the free software from the link below

<https://www.gammaspectacular.com/blue/software-downloads>

Features	Value
Input Power (USB 2.0) (Type-C)	+ 5V
Current Draw (Typical)	< 200 mA
Output Bias Voltage (smooth potentiometer)	0V to 2000
ADC Sample Rate/Bit rate	48 kHz/16 Bit
Pulse length (Adjustable) factory preset	100 $\mu$ s
Preamp Gain (Adjustable)	Line Level
Signal to Noise ratio	73.97 dB
Voltage Drift	< 1:1000V
High Voltage Connector	SHV
Signal in Connector	BNC
Audio Signal connection - switchable	TRS/TRRS
Dimensions L-W-H	99 x 99 x 35