

**New**

**R7795**

**Unattended  
Multichannel  
Analyser (UMCA)**



## Features

- 32k Digital MCA & Pulse Processor designed for laboratory and remote unattended use
- Fully supported by Quantus High Performance Quantitative Spectrometry Software
- Provides Pulse Height Analysis (PHA), Time- stamped Lists and Multichannel Scaling (MCS) modes
- Ideally suited for high resolution spectroscopy applications utilizing HPGe, CZT, Silicon, and scintillation detectors such as NaI and LaBr3 Supports Resistive Feedback and Transistor Reset preamplifiers as well as PMT anode signals
- On-board and external redundant SSD memories for List and Spectrum data storage capability (up to 200,000+ spectra)
- Web interface for unattended use and Application Programming Interface for the development of custom software solutions Designed for high reliability and more than 100,000 hours Mean Time Between Failures

## Description

The **R7795** is rack mount 32k MCA, integrating input stage for the signal conditioning, fast analogue-to-digital converter (ADC), digital processing algorithms, HV and Preamplifier Power Supply.

The R7795 unit runs Pulse Height Analysis (PHA) that is perfectly suited for multiple radiation detector technologies as high purity germanium (HPGe), silicon, cadmium zinc telluride (CZT) and scintillator detectors to perform high, medium and low-resolution gamma ray spectrometry. The unit integrates two High-Voltage Power Supply (HVPS) output to bias the detector from 50 V to 5000 V, with positive and negative polarity respectively), and provides the range of current required for specific detector types: e.g. photomultipliers (2 kV/1 mA), HPGe (5 kV/30  $\mu$ A) and silicon (500 V / 50  $\mu$ A).

The unit has been designed for laboratory and remote unattended use. It is supported by the **Quantus** and Quantus Lite<sup>(coming Soon)</sup> Spectroscopy Software for gamma-ray spectroscopy. Independently of the detector geometry or sample used, Quantus can analyse any recorded gamma-ray spectrum for radionuclide identification and quantification. Quantus Lite guarantees the data acquisition and basic spectrum analysis. The embedded Linux-based ARM processor makes R7795 well suited for unattended operations. The R7795 can be programmed to automatically start the data collection whenever external power becomes available and operate in unattended mode on a continuous basis (24/7) without any user intervention. Two SD cards, externally accessible for insertion/extraction, store all measurement results and log information in two identical copies for redundancy reasons. The presence of a OTG USB port allows the automatic data retrieval by a USB stick. The R7795 features an Application Programming Interface (API) to allow the development of custom software solutions. All relevant actions (configuration of parameters, start/stop) and data (data file, log file, configuration file) are accessible using this interface.

The unit has been designed for long time reliability guaranteeing Mean Time Between Failures (MTBF) of more than 100 000 hours.

## Ordering Options

Code	Description
WR7795XAAAAA	R7795 - Multichannel Analyser for Unattended Use (UMCA) <span data-bbox="1353 250 1433 300">RoHS</span>

## Related Products

### Hexagon



Digital MCA

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### Quantus



Quantitative Spectrometry Software

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