

SP5600C - SP5600D - SP5600E - SP5600AN

Educational kits



Advanced and compact solutions for Nuclear & Particle Physics experiments!



The CAEN Educational kits are modern, digital, and flexible platforms developed by CAEN for teaching the fundamentals of Statistics & Nuclear, and Modern Physics.

The set-ups are all based on Silicon Photomultipliers (SiPM) state-of-the-art sensors of light with single-photon sensitivity and unprecedented photon counting capability.

Ordering Options

Code	Description
WK5600XCAAAA	SP5600C - Educational Gamma Kit
WK5600XDAAAA	SP5600D - Educational Beta Kit
WK5600XEAAAA	SP5600E - Educational Photon Kit
WK5600XANAAA	SP5600AN - Educational Kit Premium Version

CAEN designed several modular Educational Kits:

SP5600C - Educational Gamma Kit, SP5600D - Educational Beta kit, SP5600E - Educational Photon kit, and a Premium version, SP5600AN, which includes all the components of the three kits.

The kits are composed of detectors and electronics modules which can be configured to perform several experiments, covering different Physics fields. What is being proposed has to do with light quanta, radioactive decays (β and γ rays) and cosmic rays.

HERA (Handy Educational Radiation Application) is a user-friendly software allowing the user to manage all mentioned CAEN kits.

The software represents a modern and flexible platform for teaching the fundamentals of Statistics, Particles Detection, and Nuclear Imaging thanks to the simple graphical interfaces and the embedded documentation and analysis tools. The user can easily manage all the parameters of the Power Supply, the Amplification Unit, and the Digitizer. The digitized signals can be monitored for real-time fine-tuning of the setup.

- HERA software for control of the system and for data analysis
- Main experiments:
 - Statistics
 - γ and β Spectroscopy: from energy spectrum to radiation absorption end more
 - Cosmic rays: from cosmic rays detection to cosmic vertical flux measurement
 - Photon detection and light distribution



Physics Experiments

Kit Model	Statistics	SiPM Characterization	Photons	Cosmic Rays	γ Spectroscopy	β Spectroscopy	Nuclear Imaging	Environmental Radioactivity Indoor	Environmental Radioactivity Outdoor	Pulse Processing
SP5600C Gamma Kit	•	-	-	-	•	-	-	•	-	-
SP5600D - Beta Kit	•	-	-	•	-	•	-	•	-	-
SP5600E Photon Kit	•	•	•	-	-	-	-	-	-	-
SP5600AN Premium Kit	•	•	•	•	•	•	-	-	-	-