

SP5620CH

Cosmic Hunter

SP5600D

Educational Beta Kit

When CAEN technology meets young talents!



From detector characterization to cosmic ravs detection!



Ordering Options

Code	Description
WSP5620CHAAAA	SP5620CH - Cosmic Hunter





Cosmic Hunter is a simple and portable device from a lab desk to a hot-air balloon! It was indeed employed at the 42nd International Balloon Festival



in Château-d'Oex to commemorate cosmic-ray pioneers.

Cosmic Hunter is a new educational tool developed to inspire young students and guide them towards the analysis and comprehension of cosmic rays. Cosmic Hunter, Silicon Photomultipliers (SiPM) based, is composed of one detection coincidence unit together with up to three plastic scintillating tiles.

Muons detection, flux estimation, shower detection and more can be performed thanks to a flexible system geometry.

The Cosmic Hunter needs no Software, All the controls are available on the module and the data can be downloaded via SD card.

CAEN is developing a new dedicated Software for the full control of the system. Through a simple graphical interface, the user can set all the parameters, manage the acquisition, and download the data -

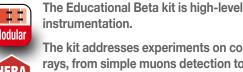
- Based on SiPM detectors and plastic scintillating tiles
- Up to 3 scintillating tiles management
- Flexible system geometry
- No needs SW interface
- Main experiments:
 - Muons Detection
 - Triple coincidence
 - Muons Vertical Flux on Horizontal Detector
 - Zenith Dependence of Muons Flux
 - Cosmic Shower Detection

Ordering Options

Code	Description					
WSP5600DAAAA	SP5600D - Educational Beta Kit					







instrumentation. The kit addresses experiments on cosmic



rays, from simple muons detection to flux estimation and angular distribution, using advanced tools for statistical analysis.

The Educational Beta kit is based on Silicon Photomultipliers (SiPM). The key element is the SP5608 - Scintillating tile. The SP5608 is an assembly with an embedded plastic scintillating tile. directly coupled to a SiPM. The tile is the ideal tool for tests with beta-emitting isotopes and cosmic rays. Thanks to the practical case assembly, SP5608 can be used as a stand-alone detector or in a cosmic telescope with two tile modules, together with the SP5609 - Telescope Mechanics.

HERA (Handy Educational Radiation Application) is a new dedicated control software for the full control of the system and the data analysis. Its "Experiment" area includes also a special section dedicated to Cosmic Rays and Beta Spectroscopy.

- Based on SiPM detectors and plastic scintillating tiles
- Up to 2 scintillating tiles management
- HERA software: remote control of the system and data analysis
- Main experiments:
- Cosmic Rays
- Beta spectroscopy
- Radiation-Matter Interaction
- Absorption coefficient measurements

Physics Experiments

Kit Model	Statistics	SiPM Characterization	Photons		Y Spectrospopy	ß Spectroscopy	Nuclear Imaging	Environmental Radioactivity Indoor	Environmental Radioactivity Outdoor	Pulse Processing
SP5620CH Cosmic Hunter	•	-	-	•	-	-	-	-	-	-
SP5600D Beta Kit	•	-	-	•	-	•	-	-	-	-