

SP5630EN

Environmental Kit

Discover the environment that surrounds us!



SP5630ENP

Environmental Kit Plus

Experience the phenomena... **Explore the Physics...** Discover the essence!

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Ordering Options

Code	Description
WSP5630ENAAAA	SP5630EN - Environmental Kit







To increase the familiarity with Environmental Radioactivity Field, CAEN



designed a dedicated educational kit, based on a Silicon Photomultipliers (SiPM) matrix coupled to a Csl Scintillator.

CAEN developed a dedicated kit to discover the environmental radioactivity around us. The goal is to oppose the public imagination that often associates a negative feeling with this natural phenomenon.

The kit is composed of i-Spector- S2570B, a full-featured radiation detector system, and a kit of samples suitable for gamma environmental detection. Teaching and training experiences are performed starting from system calibration in terms of energy and by acquiring gamma spectra to study the emission and the radioactive elements contents of different samples.

Instrumentation Web Interface can be easily controlled through its dedicated web-based interface with no need to install software on your PC. The user can monitor the status of the module, configure the HV and connection parameters, visualize the energy spectrum in real-time, perform online analysis and download the data.

- Indoor Radiation Measurements
- Energy Calibration
- Environmental background measurements
- Passive Radon measurements
- Samples and Photo-peaks identification
- Environmental Sample measurements
- SiPM based

Ordering Options

Code	Description
WSP5630ENAAA	SP5630ENP - Environmental Kit Plus







radioactive source and detector, by simulating the signals and to create specific processing of pulses.

CAEN designed a new dedicated Educational kit, the SP5630ENP - Environmental kit Plus, to guide the users towards the development of complementary measurement techniques based on counting and on the analysis of the spectrum.

The kit is composed by the i-Spector Digital (all-in-one detector, electronics and MCA), Shielding Kit (solution to perform several experiments about gamma spectroscopy and shielding materials), Csl and BGO crystals (to be coupled to the SiPM matrix), and a Sample Kit (suitable for gamma environmental detection).

The main goal is the study of the absorption of the gamma rays passing through matter thicknesses and the related observations about the different crossed materials. It is a user-friendly system for Advanced Labs based on the latest technologies and instrumentation.

- Detecting y-Radiation
- System Calibration: Linearity and Resolution
- γ-Radiation Absorption
- Comparison of different Shielding Materials
- Photonuclear cross-section/Compton Scattering cross-section
- Passive Radon measurements
- Environmental Sample identification & measurements

Physics Experiments

Kit Model	Statistics	SiPM Characterization	Photons	_	Y Spectrospopy	ß Spectroscopy	Nuclear Imaging	Environmental Radioactivity Indoor	Environmental Radioactivity Outdoor	Pulse Processing
SP5630EN Environmental kit	•	-	-	-	-	-	-	•	-	-
SP5630ENP Environmental kit Plus	•	-	-	-	-	•	-	•	-	-