



High Resolution Gamma Measurement



Applications:

- car-borne radiation monitoring system
- vehicle and personnel radiation port monitor
- aerial radiation surveying system

Introduction:

High resolution gamma spectrum measuring system, is a gamma system with innovative measurement and process architectures. The system consists of a 3x3 inch NaI (TI) detector, photomultiplier tube, preamplifier, DMCA-PCIE1k digital multi-channel card, power board, a reinforced portable laptop computer and related Ultra Spectro spectrum analysis software. Based on innovative information restoration technology, we can improve the energy resolution of the whole system, and even obtain line spectrum, which perfectly solves the problems of near-energy multi-plet resolution, weak peak resolution and so on. The system can be carried and deployed easily on site, and the user quickly constructed a set of lightweight and high performance laboratory-level gamma ray spectrometry system.

The system can greatly improve energy resolution and pulse throughput, and meet the requirements of high performance spectral measurement and analysis of complex radionuclides, such as special nuclear materials, mixtures of multiple radionuclides and even various complex radioactive contaminated area. It is especially suitable for harsh environment, difficult safeguard, low budget, and easy maintenance. The system may replace HPGe spectrum measurement system, which is expensive, unreliable and difficult to maintain. It is also especially suitable for other application scenarios, where large volume NaI (TI) spectrum measurement system is needed, such as large volume NaI (TI) car-borne radiation monitoring system, vehicle and personnel radiation port monitor, aerial radiation surveying system, and others.