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ORTEC® News**Welcome to the ORTEC Newsletter**

For 40 years **ORTEC** has been an industry leader in the design and manufacture of precision detectors, signal processing electronics, software, and systems for industry, academia, and government requirements. Our product line of over 1600 products includes equipment and instruments for nuclear power stations, government nuclear facility operations, special nuclear material safeguards, and fundamental research.

We specialise in the design and fabrication of turn-key spectroscopy systems for applications such as Radiochemistry Laboratories, Air and Liquid Effluent Monitors, Whole Body (personnel) Counters, Failed Fuel Monitors, Waste Characterisation (in situ) Systems, Non-destructive Waste and Material Assay, and Nuclear Material Safeguards and Accountability Systems.

ORTEC News is our brand new newsletter where amongst other things you will find details of new products, features on existing products, details of forthcoming training courses and a list of events we will be attending.

We hope you find it useful and of course we would appreciate any feedback on how we could make improvements to the newsletter. In addition if you have any specific topics that you would like us to cover in subsequent issues we would be delighted to hear from you.

Product Feature: ASPEC-927**Breaking News - New High Performance Dual-Input MCA at an unbeatable cost!**

The ASPEC-927 is the very latest addition to our range of Multi-Channel Analyser (MCA) systems and incorporates two completely independent high performance MCA units in a compact single-width NIM module.



With its built-in USB-2 interface, connecting the ASPEC-927 to a computer becomes a simple task and it comes supplied with our Maestro-32 MCA software, the industry standard benchmark software for MCA applications. Alternatively, the ASPEC-927 can also be supplied with the GammaVision-32 Gamma Spectrometry Analysis Software at a specially packaged price.

Multiple ASPEC-927 units can be connected to a single computer via the USB connection either directly or by the use of USB hubs. The Maestro-32 software allows live data from multiple units to be displayed simultaneously in real time.

Whether you are building a completely new spectroscopy system or upgrading an existing system the ASPEC-927 offers high performance at a very economical price.

- Dual-Input MCA with two independent 16k Resolution ADC's
- Fast 1.25µs conversion time ADC's for high throughput applications
- High-speed USB-2 connection to PC
- Loss Free Counting mode
- Hardware I/O control for Automatic Sample Changers
- Maestro-32 software

www.ortec-online.com/pdf/927.pdf

ORTEC UK Sales Team



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If you need to obtain an HPGe or Silicon detector quickly, please note we have a number of readily available stock detectors – please contact us for details.

Product Feature: 926-M32-USB & DPM-USB

The lowest cost NIM MCA available !

If you are looking to construct a Spectroscopy system and your budget is limited we may have the answer - the 926-M32-USB - a compact MCA unit packaged in a single width NIM module with a USB interface to the host computer.

Suitable for use with all types of radiation detector systems it offers excellent performance at an extremely attractive price.

- Single-input MCA with 8k Resolution ADC
- USB connection to PC
- Maestro-32 software

www.ortec-online.com/pdf/926-m32-usb.pdf



Convert your existing ORTEC MCA units to USB

Many people are successfully using older **ORTEC** MCA systems in their laboratories but are struggling to support them on their ageing computers. Typically these units connect to the host computer via a Dual Port Memory (DPM) interface and old style ISA PC interface card.

Trying to source new computers which still support the old style ISA interface has become almost impossible which may mean you are no longer able to use the MCA system - now we have a solution to this problem.....

The DPM-USB connects directly at one end to the DPM interface connector on your MCA unit and directly into the USB connection on your computer at the other, it's as simple as that !

For details on the range of MCA units supported by the DPM-USB see www.ortec-online.com/pdf/dpm_usb.pdf

Product Feature: trans-SPEC & Detective

HPGe gamma-ray spectrometer in a PORTABLE package

The trans-SPEC represents a technological breakthrough by reducing the size, weight and power needs of a sophisticated high-resolution gamma-ray detector into a portable battery-powered device.

It employs a unique class of HPGe gamma-ray detectors and offers the combination of high resolution and sensitivity required for many in-situ measurements. In the past HPGe based detection systems have had limited use in these applications as the detector element required cryogenic cooling via liquid nitrogen in order to operate correctly. The trans-SPEC removes this obstacle by incorporating a miniature, high reliability battery powered cryogenic cooler so we now have a system that offers all the performance of laboratory grade HPGe detector system but in a small, portable, and extremely reliable package.

- Rugged, hand-portable HPGe Gamma Spectrometer, Liquid Nitrogen Free
- All-in-one battery powered system with integral keypad, display and data memory
- Operates with over a wide temperature range from -15°C to + 50°C
- Can be computer controlled via USB connection and standard ORTEC software



trans-SPEC HPGe Gamma Spectrometer



trans-SPEC and ISO-CART Waste Assay System

DETECTIVE Radiation Identifier for Security Applications

Incorporating the same basic technology as the trans-SPEC is the **Detective** series of High Resolution hand-portable Radiation Identifiers. These include all the benefits of the trans-SPEC technology in addition to extremely powerful isotope identification software.

With the superior resolution of the HPGe detector system, the Detective offers in seconds definitive answers to the Detection of Illicit Nuclear Materials Trafficking. A single button press on the unit is all that is required to perform fast, simple and ultra-reliable radiological classification of suspect material as NORM, Medical, Industrial, Nuclear and Natural Isotopes.

This performance is possible due to the use of the higher energy resolution of the HPGe detector which is ~20 to 100 times better than even the most advanced Sodium Iodide (NaI) or Cadmium Zinc Telluride (CZT) detector based instruments.

Detective and Detective-100 systems offer identification based on the Gamma emissions from the source, whereas the Detective-EX and EX-100 versions add the additional capability of Neutron radiation detection.

Forthcoming Exhibitions & Training Courses

We will have a stand at each of the following exhibitions and will be happy to discuss any product requirements you may have:

- CBRN Defence Symposium, 7-9th November, Shrivenham, Wiltshire.
- Air, Port & Terminal Security (APTS), 5-6th December, Olympia Exhibition Centre, London
- Home Office Scientific Development Branch (HOSDB), 21st-22nd March 2007, RAF Halton, Bucks
- Technology Shows at AWE, Sellafield and Dounraey. Dates to be announced.

Training Courses

- GammaVision Software – 23rd-27th April 2007, Wokingham. 4 day course covering operational aspects of the software, along with associated hardware, with optional extra day for new users covering foundation Gamma technology
- Alpha Spectrometry – 4th-8th June 2007, NPL, London, covering techniques and methods used in Alpha Spectrometry
- AlphaVision Software – 11th-15th June 2007, Wokingham. One 3-day basic course, followed by a 2-day advanced course. Enrol on either, or a discounted rate is available for enrollment on both courses.

Please contact Clare Payne if you would like to attend or find out more about any of these events.



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UK MoD Awards ORTEC Contract for Portable High-Resolution Radiation Detection System

The **ORTEC** business unit of AMETEK Advanced Measurement Technology has received a £1.6 million award from the UK MoD to supply and support a state-of-the-art portable radiation detection system, for its Naval Emergency Monitoring Organisation (NEMO). The contract involves providing the MoD over a 15-year period, specifically designed hardware and software systems for its Naval Nuclear Propulsion Program.

NEMO uses gamma spectrometry systems to analyse radioactivity, both during and following a radiological incident involving its Naval Nuclear Propulsion Program to quickly determine what health protection measures are needed. NEMO deploys a number of systems throughout the UK and abroad to provide an immediate response 24/7 to a possible incident.

A key factor in awarding the contract to **ORTEC** was the performance of the trans-SPEC Portable Gamma Spectrometry System. The combination of reliability, high performance and portability of the system made it the clear choice for this demanding application.

Look out for our 2006 demo stock sale coming soon via email

Further Information.....

For further information on any of the products featured in this newsletter, please complete and return this form using the details above, or send an email request to ortec.uksales@ametek.co.uk

Title: _____ First Name: _____ Surname: _____

Job Title: _____

Company Name & Address: _____

_____ Postcode: _____

Telephone: _____ Fax: _____

Email: _____

Please tick the relevant box(es):

MCA Products

ASPEC-927

926-M32-USB

DPM-USB

trans-SPEC

Detective family

Detector Stocklist

ISO-CART Waste Assay System

Spectroscopy Systems

Training Courses, please specify

Latest CD catalogue

Please telephone me to make an appointment

If you would like us to remove your details from our database please send an email to ortec.uksales@ametek.co.uk. All requests will be completed within 5 working days of receipt.