## ADVANCED TECHNOLOGY FOR A SAFER WORLD



RIID Retro Fit Program

SYCLONE ISOTOPE IDENTIFIER







LAURUS Systems in partnership RadComm Systems has developed an advanced spectrometer technology that allows specific components of existing spectrometers to be retrofitted into RadComm's State-of-the-Art SYCLONE series of portable RIID's (handheld radio-isotope identification device). We now have the ability to upgrade and retro fit existing and potentially out of date or inoperable GR-135<sup>TM</sup> handheld spectrometers to the SYCLONE's advanced technology.

By redeploying specific components from the older devices, we can now offer the end user a fundamentally brand new instrument. Our exclusive process involves the disassembly and removal of the existing and fully functioning sensors (including He3 and moderators if applicable). After thoroughly testing and certifying that the detectors are performing reliable and accurately, the reassembly process begins. The sensors are integrated with state-of-the-art electronics, boards, and display as well as a more durable and ergonomic case. The end result is an instrument that carries a full warranty at a fraction of the acquisition cost typically associated with new devices of this type.



For current users with a significant population of older devices that have become increasingly more difficult to maintain and depend on, budget dollars and R.O.I. can be maximized by taking advantage of this revolutionary process. Depending on the instrument version and detection requirements (gamma or gamma/neutron), the cost for this upgrade is a fraction of the cost associated with the acquisition of new instruments.

From past to present. . . . At a fraction of the cost!

## **SYCLONE Handheld RIID/Spectrometer consists of:**

DETECTOR CASE	
	Detector Case: Detector Case:7"H(18cm)x9"L(23cm)x 4"W(10cm)
	Outer Detector Case: Painted Aluminum with Rubberized Protective Sleeve
	System Weight: 3.8lbs (1.7Kg)
ELECTRONICS	
	Integral PMT with EM Shielding
	High Speed DSP Circuitry with High SNR
	Ultra Stable High Voltage (1.0 Volt steps) Software Adjustable
	Controller with CPLD Technology
	RS232 Serial output port
	Battery: Alkaline and rechargeable
	Capactiy: 2200 mAh, 4.8V
	Operating time: 8 hrs (rechargeable), 12 Hour (alkaline)
	Environmental • Operating temperature: -20 °C (68 °F) +65 °C (140 °F)
	Relative Humidity: 93% non-condensing at 40 °C (104 °F)
	Shock: Complies with ANSI N42.34 • EM Compliance: Complies with ANSI N42.34 and CE requirements for safety RFI and EMI
SOFTWARE	
	Windows™ Based Syclone Application Software
	Easy to use Menu Driven Interface
	Configurable Data Storage with Backup
	Emailing Capability with Network Connection
	Data Storage - 100,000 Dose Rate samples/427 Spectra
RETROFIT	·

End User to supply current Handheld Spectrometer of which key components are retrofitted into RadComm's Syclone product. These key components are:

Geiger-Mueller, size 0.59"(12mm) x 1.8" (45mm) Gamma Nal - Size 1.5" (38mm) x 2" (51mm) He<sup>3</sup> if applicable

Each component is then tested to ensure it meets the required performance levels mentioned below. If any or all of the components fail to meet these performance specifications customer will have the option to have the Handheld Spectrometer returned to them at \*no charge and/or option to purchase a new Syclone Spectrometer.

Energy Resolution 8% or better for of 662 KeV Energy Range: 20 KeV to 3.0 MeV (Gamma)

System Calibration Software Monitor with Operator Alert

Accumulate dose up to 5 Sv, custom increase

Stabilization - Cs-137 source

Gamma Spectrum - 1024 Channels, channel capacity 16 bits

Correction - non-linear energy calibration

