

PRIED

Portable Raman Improvised Explosive Detector

***Fastest, Farthest, Safest Man-Portable
or Robot Mountable Stand-off Threat Sensing***



SPIE PRISM
Award Finalist "Top 3 Most
Innovative Optical Sensors
in the World"

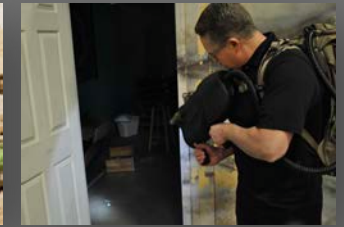
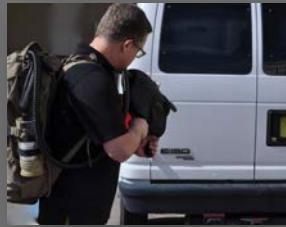


Capabilities & Benefits

- Stand-off Detection – get farther away from toxic chemicals or blast
- Speed – detect faster, farther & safer
- Eye-Safe – certified as zero-meter eye and skin hazard without eye protection.
- Exploitation – classification and real time specific identification; fastest survey and assessment
- Counter-Explosives C-IED/Force Protection – military, commercial, and home made explosives (HME)
- Counter-Weapons of mass destruction/CBRNE – chemical warfare agents, nuclear weapon processing, disablement, counter-proliferation
- Counter-Narcotics – fentanyl, heroin, cocaine, meth manufacturing
- Solid, liquid, and some gas phase detection
- Not ITAR restricted and ready for export

ALAKAI
Defense Systems 

PRIED Portable Raman Improved Explosive Detector



Specifications

PHYSICAL		Backpack	Wand
	Size	11"x10"x7"	5"x7"x15"
	Weight	Short Mission Mode (1) 18 lbs.	7 lbs.
		Extended Operation Mode (2) 24 lbs.	7 lbs.

OPERATIONAL		
	Batteries	Two (2) UBI 2590 batteries – Hot swappable
	Battery Runtime (1)	>6 hours continuous use; Hot swappable
	Storage Temperature	-33C to +60C (-27F to 140F)
	Operating Temperature	-17C to +49C (0F to 120F)
	Environments	Water tight to survive blowing rain, sand & dust

RAMAN SPECIFICATIONS		Short Range	Long Range
	Detection Range	< 10m	>10m
	Detection Time – Eye Safe Mode	3 to ≈ <30 sec.	3 to ≈ <150 sec.
	Detection Time – Max Detect Mode	1 to ≈ 10 sec.	1 to ≈ 30 sec.
	Laser Wavelength	UV (can be used covertly)	
	Spectrometer Resolution	<20cm ⁻¹	

MISCELLANEOUS		
	Imaging Capability	Onboard camera saves image with each data file- Evidence
	Alarms	Audible & Red/Green LED software configurable or Droid
	Startup time	~4min
	Data Storage	>100GB of Flash (>50,000 shots)

DETECTION LIBRARY		
	Chemicals	Detects Explosives, Home Made Explosives (HME), Chemical Warfare Agents (CWA), Nuclear Weapon Processing Chemicals, Narcotics, TICs/TIMs, Hazardous Materials (HAZMAT),

OPTIONAL INTERFACE		
	DROID phone or tablet	Displays additional classification info
	Communications	Wireless or wired-capable

Note: 1. Assumes room temperature operation for ~2 hours.
 2. Chiller and one battery are added for continuous operation or hot climates.
 - All specifications are subject to change without notification -