

2022 UPGRADE - LIGHTER WEIGHT!

PRIED

Portable Raman Improvised Explosive Detector

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

***In Production for U.S. Government
and exported to allied nations***



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	7 lbs.
		Extended Operation Mode (1)	7 lbs.
OPERATIONAL			
	Batteries	Two (2) UBI 2590 rechargeable batteries – Hot swappable	
	Battery Runtime (2)	~ 4 hours continuous use; Hot swappable	
	Storage Temperature	-33C to +60C (-27F to 140F)	
	Operating Temperature	-17C to +49C (0F to 120F)	
	Environments	IP 56 - Water tight to survive blowing rain, sand & dust	
RAMAN SPECIFICATIONS		Short Range	Long Range
	Detection Range	< 10 m	HME ≈ 50 m
	Detection Time	1 to ≈ 10 sec.	6 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. Chiller and one battery are added for continuous operation or hot climates.
2. Assumes room temperature operation.

- All specifications are subject to change without notification -

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