

SaphyRAD MS

Handheld Multiprobe Radiation
Survey Meter



- Featuring a wide range of smart probes
- New ergonomic design with built-in simulation function for training
- Designed for operations in harsh environments

SaphyRAD MS

Survey Meter for Radiological & Nuclear Events



SaphyRAD MS is a handheld multiprobe survey meter for radiation contamination detection and exposure monitoring. Its comprehensive range of probes allows for the detection of gamma, alpha, beta, neutron and X radiation, as well as gamma identification. SaphyRAD MS features an built in simulation mode for training.

Specially designed to be used with full personal CBRN protective clothing, this rugged, user-friendly device is well adapted to military operations in harsh environments. SaphyRAD MS and its associated technology have been developed within the framework of a contract with the French Defense Procurement Agency (DGA).

KEY FEATURES

- Designed for operation in harsh environments
- High resolution and large color LCD display
- Built in simulation function for training
- Designed for use with full CBRN PPE
- Built-in GPS
- Specific algorithm for very fast and reactive detection
- Wide dose rate range 0.05 μ Gy /h to 10 Gy /h
- Comprehensive range of external smart probes for source search and multiple contamination measurement
- Specially designed for use by non-radiation specialists

APPLICATIONS

- Military operations (MS)
- First responders & HAZMAT team intervention
- Emergency control of radiological contamination
- Border control
- Nuclear & environmental industries

Different Dedicated Probes for Enhanced Field Performance

SaphyRAD MS survey meter for gamma dose / dose rate measurement and its wide range of intelligent probes are the ideal association to fit the most important needs for field CBRN applications. The probes, which include calibrations parameters and self testing, are hot swappable with the SaphyRAD MS survey meter. External probes allow to search with high sensitivity alpha, beta or gamma contamination and gamma source.

This equipment has been specially designed for use in harsh environment it is compliant with AECTP 100 to 500 standards.

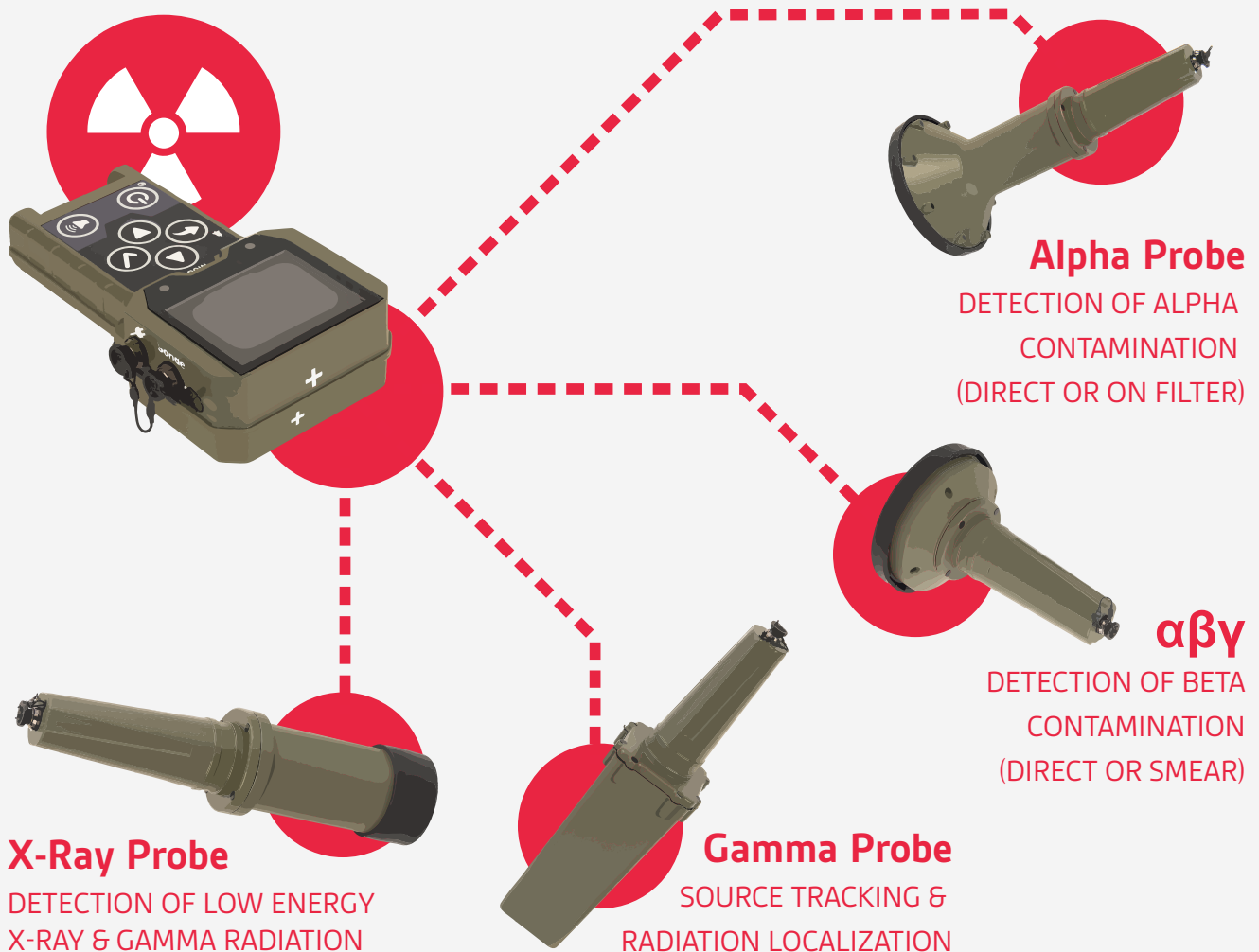
Built-in Simulation Function

SaphyRAD — alpha and beta probes — feature an embedded irradiation and contamination simulation mode, with which users can train in real conditions without the use of any radioactive sources. Its easy-to-use interface allows for a quick use even by non radiation specialists.

SaphyRAD MS Probes

Mission Specific External Smart Probes

SaphyRAD MS probes are designed to meet the operational needs of the Armed Forces, HAZMAT Teams and First Responders. They are easily connected to the device, using a cable and a plug on the side of the meter. They are then automatically recognized and powered by the monitor.



Handheld Multiprobe Radiation Survey Meter

Technical Data

Size	Approx. 194 x 115 x 49 mm (7,6"L x 4,5"W x 1,9"H)
Weight	Approx. 660g (7 oz)
Gamma Measurement Range	Dose rate: 0,05 μ Sv/h to 10 Sv/h Dose: 1 μ Sv to 10 Sv
Energy Range	50keV to 3MeV
Operating Temperature	-20 to +50 °C -4 to +122°F
Storage Temperature	-30 to +60 °C -22 to +140°F
Protection Class	IP65
Autonomy	Lithium batteries: 34h Alkaline batteries: 22h NiMH rechargeable batteries: 18h

User Interface

Screen: 3.5" color LCD display (320 x 240px with automatic backlight level)
Keyboard: 6 large buttons designed for use with CBRN clothing
Alarm indicators: 1 red LED, 1 high level buzzer (adjustable), 1 vibrator

Standard








Designed following AEP D/104 Capability and systems requirements for nuclear and radiological detection, identification and monitoring

Optional Features

Maintenance software

Additional Features

GPS, SD card included

							
	Gamma Probe	αβγ Probe	Alpha Probe	X-ray Probe	Neutron Probe	Alpha Pencil Probe / Wound Probe	Identification Probe
APP	Source tracking and radiation localization	Detection of beta contamination (direct or smear)	Detection of alpha contamination (direct or on filter)	Detection of low energy X-ray and gamma radiation	Neutron detection	Detection of alpha contamination in wounds	Identification of radionuclides
ADV	Very high detection sensitivity (500x more sensitive than GMs)	Universal detection alpha, beta, gamma	Sensitivity for alpha radiation	Contamination monitoring at several tens of cm	Very high sensitivity neutron detection	Sorting of victims to bring appropriate medical care	Compliant with military standards
TYPE OF SENSOR	Plastic scintillator 145 cm ³ + ZnS layer	Pancake GM 16 cm ²	ZnS layer on 123 cm ² thick plastic	CsI Ø 38mm, THICKNESS 1 mm	He3 Tube at 6 atm	CdTe active surface 25mm ² (Alpha emitter detection by X-ray detection)	CeBr3 scintillator assembly, 25 x 25 mm cylindrical
SEN	1000 c / s / μ Sv / h (137Cs)	0.15 c/s/Bq (60Co)	0.23 c / s / Bq (241Am)	8,5 cm5 c / s / kBq (241Am)	37.4 c / s / μ Sv / h (253Cf)	-0.068 c / s / kBq (241Am @ 5 cm)	400 cps/(μ Sv / h)
NRG RAN	30 keV to 1.5 MeV	E _{max} > 100keV	3 to 8 MeV	10 to 70 keV	50 keV to 15 MeV	10 keV to 20 keV	0.3 to 3MeV
SIZE	335 x 84 x 84 mm 650 g	189 x 130 mm (L x Ø) 390 g	333 x 149 mm (L x Ø) 720 g	284 x 72 mm (L x Ø) 420 g	245 x191 x113mm 1080 g	194 x 16 mm (L x Ø) 140 g	328 x84 x84 mm 1080 g



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