

PERSONAL RADIATION DETECTOR

DESCRIPTION	An alarming Personal Radiation Detector (PRD) worn on the body to detect photons and, in some cases, neutrons.		
RESOURCE CATEGORY	Prevention	RESOURCE KIND	Equipment
OVERALL FUNCTION	This equipment detects the presence of radiation in a limited area in the vicinity of the equipment operator	COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"> 1. The Agency Having Jurisdiction (AHJ) and requestor should address the following prior to deployment: <ol style="list-style-type: none"> a. Logistics support, such as transportation and personnel b. Type of incident and event c. Spare batteries and battery recharging d. Additional features, such as dose rate capable, low profile mode, ruggedized, and network capable e. Global Positioning System 2. The requestor can request this resource with or without the personnel component of a National Incident Management System (NIMS) Type 2 Preventive Radiological Nuclear Detection (PRND) Screener 3. If the requestor orders this resource without personnel, the AHJ should have a NIMS Type 2 PRND Screener or provide face-to-face training specific to the mission, without lag time between training and mission deployment

RESOURCE TYPES			TYPE 1	TYPE 2	NO TYPE 3	NO TYPE 4
COMPONENT	METRIC/ MEASURE	CAPABILITY				
Equipment	Per Resource	Radiation Detection	Same as Type 2, PLUS: Neutron	Gamma	Not Applicable	Not Applicable
			NOTES: Not Specified			

Superseded

COMMENTS

1. Gamma Detector types include sodium iodide (NaI), cesium iodide (CsI), cadmium zinc telluride (CZT) solid state detectors, and other scintillator or solid state detectors
2. Less effective PRND detector types include gas filled detectors, such as Geiger Mueller or Ion Chamber detectors

REFERENCES

1. American National Standards Institute/Institute of Electrical and Electronics Engineers, Inc. (ANSI/IEEE) N42.32-2006 American National Standard Performance Criteria for Alarming Personal Radiation Detectors for Homeland Security, February 2007
2. ANSI/IEEE N42.48-2008 American National Standard Performance Requirements for Spectroscopic Personal Radiation Detectors (SPRDs) for Homeland Security, May 2008

NOTES

Nationally typed resources represent the minimum criteria for the associated component and capability.

Superseded