

## VEHICLE-MOUNTED RADIOLOGICAL NUCLEAR DETECTION SYSTEM

<b>DESCRIPTION</b>	A Vehicle-Mounted Radiological Nuclear Detection System is vehicular platform-transported (such as by truck, boat, or aircraft) instrument that detects radiological and nuclear material.		
<b>RESOURCE CATEGORY</b>	Prevention	<b>RESOURCE KIND</b>	Equipment
<b>OVERALL FUNCTION</b>	<p>This equipment:</p> <ol style="list-style-type: none"> <li>1. Detects the presence of radiological and nuclear material</li> <li>2. Identifies radioisotopes in a wide area around the vehicular platform</li> <li>3. Users may permanently mount the system in a vehicular platform, such as a truck, boat, or aircraft, and reposition it between platforms</li> <li>4. Due to the larger detector element and power source, the device's detection range may be greater than a Personal Radiation Detector (PRD), Radio-Isotope Identification Device (RIID), or Human Portable Radiation Detector</li> </ol>	<b>COMPOSITION AND ORDERING SPECIFICATIONS</b>	<ol style="list-style-type: none"> <li>1. The Agency Having Jurisdiction (AHJ) and requestor should address the following prior to deployment: <ol style="list-style-type: none"> <li>a. Logistics support such as transportation and personnel</li> <li>b. Type of incident and event</li> <li>c. Spare batteries and battery recharging capabilities</li> <li>d. Additional features, such as dose rate capable, low profile mode, ruggedized, and network capable</li> <li>e. Global Positioning System</li> </ol> </li> <li>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</li> <li>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</li> </ol>

RESOURCE TYPES			TYPE 1	TYPE 2	TYPE 3	TYPE 4
COMPONENT	METRIC/ MEASURE	CAPABILITY				
Equipment	Per Resource	Radiation Detection	Same as Type 2	Same as Type 3, PLUS: Neutron	Same as Type 4	Gamma
			NOTES: Not Specified			
Equipment	Per Resource	Isotope Identification	Same as Type 3	Same as Type 4	Isotopes	No capability
			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Superseded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

## REFERENCES

1. American National Standards Institute/Institute of Electrical and Electronics Engineers, Inc. (ANSI/IEEE) N42.43-2006 American National Standard Performance Criteria for Mobile and Transportable Radiation Monitors Used for Homeland Security, May 2007

## NOTES

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

**Superseded**