

GT2™ Geiger-Muller Sensor

The growing use of radiological material in a variety of industries and the global threat of terrorism has increased the risk of unwanted radiation exposure. Homeland, physical security and radiation safety professionals and first responders are seeking advanced tools to protect workers and the public.

Defentect's GT2™ IP Geiger-Muller (GM) "stand-off" sensor detects radiation in designated areas and, via Defentect's DM3™ software, notifies required personnel of a radiological event. The Power-over-Ethernet (PoE) sensor enables remote monitoring, real-time alerts and browser-based management. PoE enables easy installation.

During a radiological event above a preset threshold, alert, count and date/time stamp are sent to the DM3 messaging system.

The system can be up set as an area monitor or portal monitor. With demonstrated sensitivity of below 50 uR/hr, and a typical response time of less than one second, the sensor transmits its data corresponding to a radiation event back to the DM3 server.

Sensors can be positioned adjacent to security cameras to provide visual identification of a threat, or hidden above ceilings and behind walls to prevent being compromised.

System administrators can designate the appropriate alerts to be triggered through the DM3 control panel. These alerts can include messages to PDAs, cell phones, pagers or other mobile clients, as well as communications to other command and

control systems to better incorporate radiation detection into the security framework of the organization.

Through DM3, the system's sensors can be paired with a facility's security network for truly integrated Intelligent Threat Awareness.

Key GT2 features include:

- Internal Geiger-Mueller Tube
- Background Subtraction
- Analog-to-Digital Conversion
- Remote access
- NEMA Security Enclosure
- Power-over-Ethernet (PoE)

[GT2 information on RKB](#)



GT2™ GM Sensor
w/ NEMA IV housing

GT2™ System Specifications

GT2 sensors, integrated with Defentect architecture and connected to a server, create a grid of threat-level radiation protection. Networked to Defentect software, GT2 triggers alerts to incident command centers or mobile clients. GT2 is designed to avoid innocent positives caused by low-level radiation from medical treatments and naturally occurring radiation.

<i>Operating Indicted Use</i>	Gamma Detection: Above 7 keV
<i>Sensitivity</i>	50 uR/hr
<i>Sampling Rate</i>	1 Millisecond
<i>Detector</i>	1.5 Inch Geiger-Mueller
<i>System Chassis</i>	NEMA IV rated security enclosure
<i>Power Consumption</i>	Source PoE GT2 draws 150mA @ 5v. 3.0 BTU/hr.
<i>Dimensions (standard enclosure only)</i>	6" H x 4" W x 6" D / 2 Lbs
<i>External Connector</i>	Panduit INDUSTRIALNET™ TX5e™ Coupler Part Number: IAEBHC5E Mates with: INDUSTRIALNET™ TX5e™ Shielded Plug Part Number: MPSI588T

For more information or to schedule a web demonstration, please call toll free: 888-868-8386.

Sensitivity of the Gammatect GT2™ Radiation Sensor

Source Activity In Curies (Ci)	Approximate Detection Distance in Feet
50 μ Ci	.5
100 μ Ci	.8
10 mCi	8
50 mCi	25
500 mCi	57
1 Ci	77
100 Ci	580

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The GT2 has demonstrated detection below 500 μ R/hr based on testing performed at JRT Calibration Services, an ANSI & NRC certified calibration facility. Detection distances for various activity levels in this table were calculated with the RadPro Calculator using 500 μ R/h.

*<http://www.radprocalculator.com/Gamma.aspx>