



ALPHA, BETA, GAMMA & X-RADIATION

# Introducing ONYX®

*For Radiation Safety and Security*

- Smallest radiation detector in its class
- Detects Alpha, Beta, Gamma and X-radiation
- Pancake detector for surface contamination
- Can be used for general survey applications
- Stores and shares data rapidly

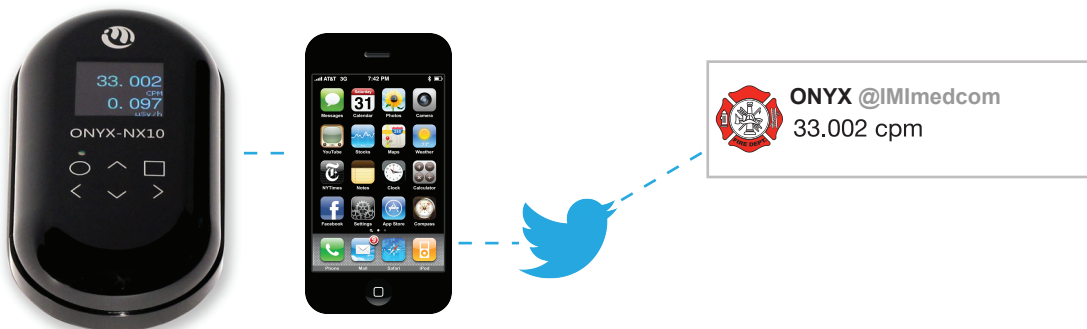


*Weights less than 1/2 lb!*



## Sharing Radiation Data Just Got Easier!

Push radiation data to the cloud with your smartphone



For more informaton contact:  
IMI - International Medcom, Inc.  
[orders@medcom.com](mailto:orders@medcom.com)  
707-823-0336  
[www.medcom.com](http://www.medcom.com)





## Specifications

|                          |                                                                                                                                                                                        |                                                                                                                                                     |                   |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <b>Detector</b>          | LND 7317 "Pancake" Halogen-Quenched Geiger-Mueller tube; Effective diameter 1.75" (45 mm); Mica window density 1.5-2.0 mg/cm <sup>2</sup> ; Detects Alpha, Beta, Gamma and X-radiation |                                                                                                                                                     |                   |
| <b>Display</b>           | 128×128 color OLED (Organic Light Emitting Diode)                                                                                                                                      |                                                                                                                                                     |                   |
| <b>Operating Range</b>   | μSv/hr: .000 to 1,000<br>mR/hr: .000 to 100<br>CPM: 0 to 350,000                                                                                                                       |                                                                                                                                                     |                   |
| <b>Calibration</b>       | Cesium-137 (gamma from daughter metastable Barium)                                                                                                                                     |                                                                                                                                                     |                   |
| <b>Gamma Sensitivity</b> | 334 CPM per μSv/hr (3340 CPM per mR/hr) referenced to Cs-137                                                                                                                           |                                                                                                                                                     |                   |
| <b>Efficiencies</b>      | <b>For 2 pi Geometry (typical Efficiencies, primary emissions noted)</b>                                                                                                               |                                                                                                                                                     |                   |
|                          | <b>Isotopes</b>                                                                                                                                                                        | <b>Energy</b>                                                                                                                                       | <b>Efficiency</b> |
|                          | Pu - 239                                                                                                                                                                               | 5.245 MeV<br>(alpha primarily)                                                                                                                      | 20 to 36%         |
|                          | Th - 230                                                                                                                                                                               | 4.621 MeV (alpha)                                                                                                                                   | 16 to 36%         |
|                          | SrY-90                                                                                                                                                                                 | 546 keV avg, 2.3 MeV max<br>(beta)                                                                                                                  | 48%               |
|                          | Cs - 137                                                                                                                                                                               | Betas (-)<br>5.6 % - 1,176 keV max<br>(416.3 keV average)<br>94.4% - 514 keV max<br>(174 keV average)<br><br>Gamma 661 keV<br>(released by Ba-137m) | 48%               |
|                          | Tc - 99                                                                                                                                                                                | 294 keV beta                                                                                                                                        | 48 to 56%         |
| <b>Accuracy</b>          | +/- 10% typical, +/- 15% maximum                                                                                                                                                       |                                                                                                                                                     |                   |
| <b>Alert Range</b>       | 0 to 99,999 CPM; Beeper sounds alert when warning level feature is activated                                                                                                           |                                                                                                                                                     |                   |
| <b>Average</b>           | Accumulate/Average feature builds average over time when activated                                                                                                                     |                                                                                                                                                     |                   |
| <b>Count Light</b>       | Red LED flashes with each count                                                                                                                                                        |                                                                                                                                                     |                   |
| <b>Audio</b>             | Beeper chirps for each count when Geiger Beep function is activated                                                                                                                    |                                                                                                                                                     |                   |
| <b>Ports</b>             | Output: 3.5 mm jack sends pulses to Safecast iPhone application                                                                                                                        |                                                                                                                                                     |                   |
| <b>Anti-Saturation</b>   | Readout holds at full scale in fields up to 100 times the maximum reading                                                                                                              |                                                                                                                                                     |                   |
| <b>Temperature Range</b> | -20 to +50 C, -4 to +122 F                                                                                                                                                             |                                                                                                                                                     |                   |
| <b>Power</b>             | One 3.7 V Lithium Ion battery                                                                                                                                                          |                                                                                                                                                     |                   |
| <b>Size</b>              | 130 X 660 X 230 mm (5.1 X 2.6 X 0.9 inches)                                                                                                                                            |                                                                                                                                                     |                   |
| <b>Weight</b>            | 200 grams (7 oz) including battery                                                                                                                                                     |                                                                                                                                                     |                   |
| <b>Options</b>           | USB cable, charger and carrying case available                                                                                                                                         |                                                                                                                                                     |                   |
| <b>Certifications</b>    | CE Certified: Emissions: EN 55011:2009 +A1:2010 (Class B emissions limits); EN: 61000-4-2:1995 (ESD); EN 61000-4-3:1997. RoHs Compliant; Meets WEEE Standards                          |                                                                                                                                                     |                   |