New Thermo Scientific Gamma Neutron Pagers with rejection of gamma background alarms.

Features:
- Pocket-sized gamma neutron pager
- Very high neutron and gamma sensitivity
- Ideal for law enforcement officers and first responders
- Immediate classification of gamma source (NORM/non-NORM)
- Energy compensated gamma dose rate
- Dual gamma/neutron display
- No false neutron alarms for even intense gamma sources
- The RadEye GN+ has an uncompromised neutron sensitivity even when high energy gamma radiation is present

New Thermo Scientific™ RadEye™ GN Series Gamma Neutron Pagers combine the superior performance of the Thermo Scientific RadEye PRD Gamma Pager with a very high neutron sensitivity that meets the time-to-alarm requirements of ANSI 42.32 and IEC 62401. The RadEye GN Series includes new significantly enhanced performance of the built-in NBR circuitry (NBR = Natural Background Rejection).

The RadEye GN / GN+ is engineered with distinguishable audible and visible alarms alerting the operator to a reading of gamma, neutron or both. The instrument is equipped with a multi-colored LED alarm, multi-tonal alarms and a flashing count-rate/dose-rate display with critical detection readings.

The RadEye GN / GN+ offers different audible alarms, discriminating between elevated background/NORM and any artificial isotope alarm.

Both RadEye GN and RadEye GN+ incorporate a single highly sensitive scintillation detector which is equipped with a miniature photo-multiplier allowing the detection of very low radiation levels of both gamma and neutron radiation. The ability to measure both types of radiation from any source with a single detector provides superior detection capabilities in a very small and compact instrument design. The RadEye GN uses a conventional Li-6 doped scintillator material and the RadEye GN+ contains a Ce doped Cs2LiYCl6 (CLYC) crystal. CLYC provides superior gamma neutron separation enabling the use of the RadEye GN+ even in scenarios of combined gamma neutron fields containing high energy gamma radiation.
In conjunction with the optional moderator (# 425067177), the RadEye GN / GN+ pagers can be transformed into a powerful handheld gamma/neutron search device at very little additional cost. An estimation of the neutron dose rate can thus be achieved for perimeter marking as well.

The display includes a quick-view bar graph of current count-rate / dose-rate and alarm set points, including the floating sigma alarm point, if utilized.

A bright orange LED for gamma alarms and a bright blue LED for neutron alarms is viewable from the front and above. When a dual gamma and neutron alarm is detected, both LEDs flash. Both readings on the display are flashed with a reversed background. The RadEye GN / GN+ can be fitted with the Bluetooth™ (#425067087) back that can be set to talk to a PC, or to other devices for networking.

**Technical details of the Thermo Scientific RadEye GN / GN+ Gamma Neutron Pager**

<table>
<thead>
<tr>
<th>Size</th>
<th>96 mm x 61 mm x 31 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>160 g</td>
</tr>
<tr>
<td>Battery life time</td>
<td>Approx. 400 h with 2 ea. AAA alkaline cells</td>
</tr>
<tr>
<td>Detection capability</td>
<td>Gamma count-rate from 30 keV to 1.3 MeV</td>
</tr>
<tr>
<td>Energy compensated gamma doserate from 45 keV to 1.3 MeV (H*(10)) from 1 µR/h to 25 mR/h (0.01 µSv/h to 250 µSv/h)</td>
<td></td>
</tr>
<tr>
<td>Neutron count-rate from 0.1 to 2000 cps</td>
<td></td>
</tr>
<tr>
<td>Gamma count rate efficiency</td>
<td>RadEye GN: 1000 cps / µSv/h (Am-241); 110 cps / µSv/h (Cs-137); 65 cps / µSv/h (Co-60)</td>
</tr>
<tr>
<td>RadEye GN+: 2000 cps / µSv/h (Am-241); 110 cps / µSv/h (Cs-137); 55 cps / µSv/h (Co-60)</td>
<td></td>
</tr>
<tr>
<td>Neutron detection capabilities</td>
<td>Meets ANSI 42.32 and IEC 62401 alarm requirements: Detection of 20,000 n/s Cf-252; shielded in 1 cm lead 25 cm in front of instrument with 30 cm x 30 cm x 15 cm PMMA phantom</td>
</tr>
<tr>
<td>No false neutron alarms at 100 µSv/h Co-60 (ANSI 42.32, IEC 62401): Both RadEye GN and RadEye GN+</td>
<td></td>
</tr>
<tr>
<td>Unaffected neutron alarm at 100 µSv/h Co-60 (IEC 62534): RadEye GN+ only</td>
<td></td>
</tr>
<tr>
<td>Order number</td>
<td>RadEye GN: #4250630 RadEye GN+: #4250631</td>
</tr>
</tbody>
</table>

**NBR = Natural Background Rejection**

The NBR measurement method has been developed by Thermo Fisher Scientific, for extremely fast discrimination between natural and artificial gamma radiation. Many thousands of devices, based on this technology, are in use worldwide.

thermoscientific.com

© 2013 Thermo Fisher Scientific Inc. All rights reserved. Bluetooth is a trademark of Bluetooth SIG, Inc., Bellevue, Washington, United States. All other trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Results may vary under different operating conditions. Thermo Fisher Scientific makes no warranties, expressed or implied, in this product summary. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representatives for details.

Europe, Africa Middle East & Countries Not Listed

Frauenauracher Strasse 96
D-91056 Erlangen, Germany
+49 (0) 9131 998-226
+49 (0) 9131 998-172 fax
customerservice.eid.erlangen@thermofisher.com

China
7th Floor, Tower West, Yonghe Plaza
No. 28 Andingmen E. Street, Beijing, 100007 China
+86 10 8419 3588
+86 10 8419 3581 fax
info.eid.china@thermofisher.com

Singapore
11 Biopolis Way, Helios, Units #12-07/08
Singapore 138967
+65 6478 9728
+65 6478 9595 fax
info.eid.singapore@thermofisher.com

USA, Canada, Mexico, Central & South America

27 Forge Parkway
Franklin, MA 02038 USA
+1 (800) 274 4212 US toll-free
info.eid@thermofisher.com
+1 (508) 520 2815 fax

India
Plot No. C - 327, T.T.C. Industrial Area, Pavneshwar
Navi Mumbai 400 705, India
+91-22-41578800
+91-22-41578801 fax
info.eid.india@thermofisher.com

United Kingdom
Bath Road, Beeston
Reading RG2 7PR United Kingdom
+44 (0) 118 971 5042
+44 (0) 118 971 2835 fax
customerservice.eid.beeston@thermofisher.com

130516_DBP_RadEye GN+ - e-V1.0