

HUMAN HEALTH

ENVIRONMENTAL HEALTH



# TAKE COMMAND OF YOUR GAMMA COUNTING



**WIZARD<sup>200</sup>**  
Automated Gamma Counters



## THE ONE TO COUNT ON FOR YEARS TO COME

Whether you're conducting research, testing or monitoring, you know that gamma counting delivers unprecedented sensitivity for results you can trust. Now, with the WIZARD<sup>2</sup> family of automatic gamma counters, you can have outstanding sensitivity together with the highest-level security, connectivity and ease of use, giving you greater command over your gamma counting process. Whatever your application need, there's a WIZARD<sup>2</sup> that delivers superior gamma counting performance.

### A gamma counter for today's needs – and tomorrow's challenges

Today's laboratories are pressured to do more with less – fewer resources, less time and tighter turnaround expectations. WIZARD<sup>2</sup> gamma counters offer enhanced features to make sure you're up to the challenge now and in the future.

- **Simplicity.** Easy viewing and editing of instrument performance parameters such as protocol definition, conveyor movement, general settings and instrument diagnostic settings
- **WIZARD<sup>2</sup> Result Viewer.** Customized easy and fast data viewing and exporting of sample data, Instrument Performance Assessment™ (IPA), normalization and spectral data
- **Fully automated data analysis.** StatLIA® Quantum Premium for RIA/IRMA and custom data analysis and reporting lets you easily create and transfer custom reports
- **STAT.** Allows high priority, interrupt sample measurement
- **Networkability.** WIZARD<sup>2</sup> instruments now include Ethernet connections to easily share and analyze your data
- **21 CFR Part 11 compatibility.** With the Enhanced Security option, you can automate your access control, file security and audit trail for electronic record compliance
- **More choices than ever.** From routine counting to more sophisticated research to customer validated clinical solutions in a regulated environment, there's a WIZARD<sup>2</sup> that's right for your lab

WIZARD<sup>2</sup> – the ultimate gamma counter that gives today's laboratories a commanding long-term solution.

# SUPERIOR PERFORMANCE LABS EVERYWHERE DEPEND ON

Laboratory professionals have relied on WIZARD® and WIZARD<sup>2</sup> for years. That's because WIZARD<sup>2</sup> instruments have consistently provided superior gamma counting performance. Only WIZARD<sup>2</sup> counters provide the following high-performance features.

## Well-type detectors for superior counting efficiency

Well-type NaI (TI) detectors collect signals from all around the sample rather than from the sides only. This minimizes the variance effect caused by sample position and volume and provides the best counting efficiency possible.



Well-type detector

## Effective lead shielding for consistent background and minimal cross talk

In a universal gamma counter, the lead shielding around the detector is another important factor in determining the performance of the instrument. WIZARD<sup>2</sup> counters have no open elevator passages through which interfering radiation can pass to the detector. Additionally, they feature the most lead shielding available on gamma counters today. As a result, you can rely on WIZARD<sup>2</sup> counters to surpass all other gamma counters in background and cross talk reduction.

### WIZARD<sup>2</sup> lead shielding: thicker for greater accuracy

Instruments	Detector Lead Thickness (mm/in)	Lead Shielding Thickness (mm/in)
2470 WIZARD <sup>2</sup>	30/1.2	12/0.5
2480 WIZARD <sup>2</sup>	75/3.0	50/2.0

## Robotic sample changer further minimizes cross talk

Only WIZARD<sup>2</sup> counters feature a unique sample changer system that enables the lifting of samples to the well-type detectors from a conveyor. The conveyor, with the remaining samples, always remains hidden behind the lead shielding.



Robotic sample changer

# SOPHISTICATED TECHNOLOGIES FOR FASTER, EASIER ANALYSIS

Improve your entire process with WIZARD<sup>2</sup>, from gamma counting studies to studies for use in customer validated clinical solutions. With the addition of StatLIA<sup>®</sup> Quantum software, you can now achieve accuracy, performance and quality control – while significantly reducing the time required for validation in clinical settings.

## StatLIA<sup>®</sup> Quantum provides powerful analysis

Improve the accuracy, reliability and performance of your WIZARD<sup>2</sup> assays by using StatLIA<sup>®</sup> Quantum advanced, proven computations to analyze your data. These advanced computations enable StatLIA<sup>®</sup> to generate informative graphs and metrics unique to StatLIA<sup>®</sup> that make it easy to monitor your assays at a glance with much greater insight.

## TrueFit™ data reduction improves accuracy

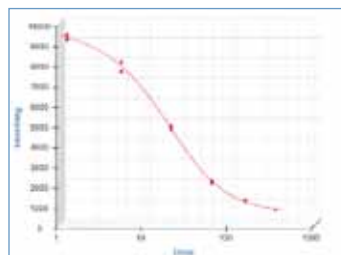
Use your historical data to automatically compute a custom weighting for each test method protocol with the StatLIA<sup>®</sup> TrueFit™ data reduction system. Then StatLIA<sup>®</sup> incorporates this custom weighting into an industry-leading 5-parameter logistic curve-fitting model or other curve-fitting options to provide the most accurate results available for nonlinear data.

- TrueFit™ 5-parameter logistic or 4-parameter logistic, linear regression
- Custom weighting
- Concentration error computed for each result
- Parallelism and relative potency analysis

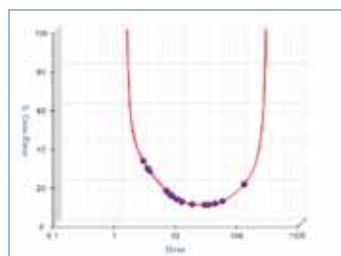
## The StatLIA<sup>®</sup> SmartQC™ improves reliability

Get detailed insight into the performance of your assays and the reliability of your results with SmartQC™ statistical assay analysis.

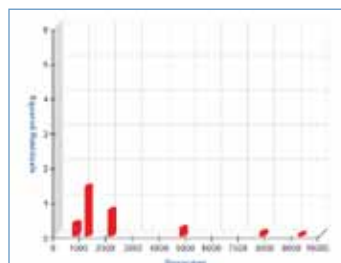
- Monitor your assays at a glance with informative graphs
- Assay and result performance analysis and acceptance criteria
- Assay troubleshooting made easy
- Powerful metrics and graphs: limits of quantitation, % error profile, residual error, statistical analysis of standards, controls, unknowns



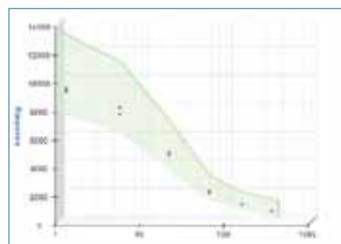
5-PL standard curve graph



% error profile of concentrations with unknowns plotted



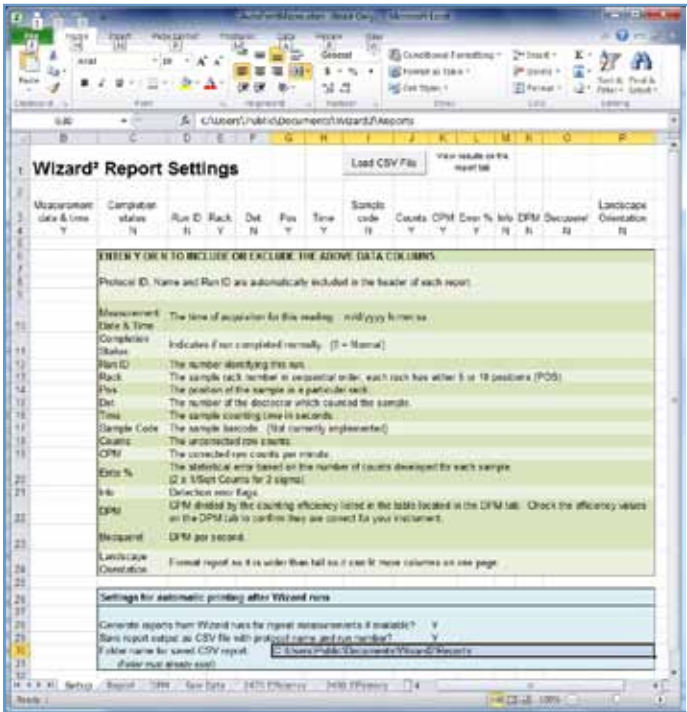
Squared residual error plots of standard points



95% confidence region of historical standard curves with standard points from current assay

## Flexibility matches your workflow

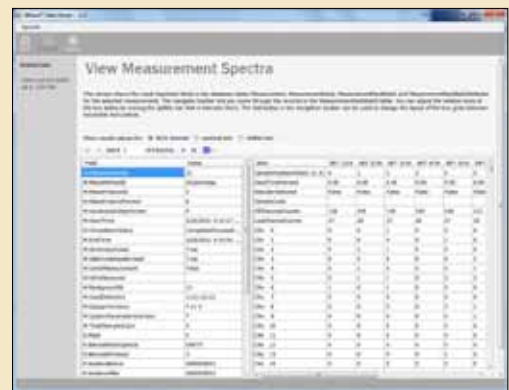
- Select from list of assay report templates
- Customize reports to specific needs
- Maintain access to all previous assays for pooled analysis or recomputations
- Integrate easily to LIM systems



The Autoprint utility provides convenient customized raw-data printed reports.

## WIZARD<sup>2</sup> Result Viewer

Accurate and accessible, the WIZARD<sup>2</sup> Result Viewer makes viewing and exporting data so easy that training is a snap.



The WIZARD<sup>2</sup> Results Viewer allows post-run reporting of acquired raw data and spectral data.

With StatLIA<sup>®</sup> Quantum, you're ready for virtually any gamma counting need.

# WHICH WIZARD<sup>2</sup> IS RIGHT FOR YOU?

WIZARD<sup>2</sup> gamma counters offer you choice in sample capacity, shielding thickness and configurations, including optional security features. With so many options, there's a WIZARD<sup>2</sup> that's right for you and your applications. No matter which model you choose, you can count on superior gamma counting performance year after year.

## FOR RESEARCH APPLICATIONS

### 2470 WIZARD<sup>2</sup> with optional StatLIA<sup>®</sup> Quantum data analysis

- **Ideal for RIA and IRMA studies.** All RIA tube-based studies can be performed with WIZARD<sup>2</sup> instruments. Optional StatLIA<sup>®</sup> Quantum software can be added for additional data analysis
- **Perfect for chromium release studies.** No cross talk from samples on the conveyor means that the WIZARD<sup>2</sup> is optimal for working with higher energy isotopes such as <sup>51</sup>Cr
- **Isotope library.** Contains information for 45 radionuclides
- **IPA.** WIZARD<sup>2</sup> monitors 9 detector parameters and automatically provides their documentation
- **LAN connectivity and USB.** Makes networking and data transfer easy
- **Choice of models.** Available with 1, 2, 5 or 10 detectors with 550-sample capacity; 5 and 10 detectors with 1,000-sample capacity
- **Compact footprint.** The 550-sample WIZARD<sup>2</sup> is the smallest automatic 10-detector gamma counter available. Its 65 x 77 cm (25.6 x 30.3 in) footprint makes the most of your lab space
- **Enhanced Security compatibility.** With the Enhanced Security option, you can automate your access control, file security and audit trail for electronic record compliance
- **Results Viewer utility.** This option allows you to access and export data from the WIZARD<sup>2</sup> database

## FOR RESEARCH, ANALYTICAL OR CUSTOMER CLINICAL APPLICATIONS

### 2480 WIZARD<sup>2</sup> with optional StatLIA<sup>®</sup> Quantum

- **Superior performance for PET studies.** Designed for minimal cross talk, the 2480 WIZARD<sup>2</sup> delivers the best possible counting performance for PET studies
- **Ideal for high-energy or low-activity samples.** With its high-efficiency detector, ability to count sample volumes up to 20 mL and effective lead shielding, the 2480 WIZARD<sup>2</sup> is particularly suitable for high-energy gamma emitters, low-activity samples, environmental samples or Schilling tests
- **High-efficiency, 3-inch well-type detector.** Delivers improved counting efficiency, extended energy range and better energy resolution
- **Isotope library.** Contains information for 51 radionuclides
- **One model for all special application needs.** Accommodates both 1,000- and 270-sample capacity of 13 mm (0.5 in) and 28 mm (1.1 in) vial diameters, respectively
- **IPA.** WIZARD<sup>2</sup> monitors 9 detector parameters and automatically provides their documentation
- **Enhanced Security compatibility.** With the Enhanced Security option, you can automate your access control, file security and audit trail for electronic record compliance
- **LAN connectivity and USB.** Makes networking and data transfer easy
- **Results Viewer utility.** Access and export data from the WIZARD<sup>2</sup> database

## SUPERIOR PERFORMANCE, YET EASY TO USE

No matter which model you choose, WIZARD<sup>2</sup> is designed for ease of use. Once protocols are entered, simply load your samples and press START. It's that simple to take command of your gamma counting.



WIZARD<sup>2</sup> is available in several models featuring 550- and 1,000-sample configurations and with 1, 2, 5 or 10 detectors.

## PerkinElmer IPA: designed to detect any errors before you do



Exclusive to WIZARD<sup>2</sup>, IPA automatically supports laboratory QC systems by performing routine tasks for continued reliability.

- Auto-diagnosing inspects the isotope spectrum each time a sample is measured and immediately warns of any condition that generates an unexpected result
- Performance assessment automatically monitors parameters such as relative and absolute efficiency on each detector and provides documentation
- IPA offers at-a-glance performance history views on the WIZARD<sup>2</sup> simple touch screen, which further improves your lab's productivity

## WIZARD<sup>2</sup>: Choose the model and options right for your labs

	2470 WIZARD <sup>2</sup>		2480 WIZARD <sup>2</sup>
Sample capacity available	550	1,000	270/1,000*
# of detectors available	1, 2, 5 or 10	5 or 10	single 3-inch detector
WIZARD <sup>2</sup> Data Viewer	optional	optional	standard
StatLIA <sup>®</sup> Quantum	optional	optional	optional

\* Model can run 270 20 mL vials or 1,000 12 x 75 mm tubes.

## Count on WIZARD<sup>2</sup>

From setup to training, low to high capacity, simple counting studies to sophisticated analysis, look to WIZARD<sup>2</sup> as the long-term solution that delivers superior counting performance and excellent security. It's the one your lab can count on for years to come.

## Results. Smarter. Faster.

With a growing emphasis on translational insight, it is more important than ever to be able to examine the molecular mechanisms of disease and translate your *in vitro* models into *in vivo* results. PerkinElmer offers leading solutions and renowned expertise in assays, imaging and informatics that will help you bring it all together. Whether working in a well, cells or small animals, now you can focus on your science, gain insight sooner and succeed faster.

Learn more at [www.perkinelmer.com/wizard2](http://www.perkinelmer.com/wizard2)

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