



Annual Users' Conference

**ADVANCING RADIATION SAFETY.
EMPOWERING PROGRESS.**

M Resort, Henderson, NV | June 15 – June 18



MIRION
TECHNOLOGIES

*Advancing Radiation Safety.
Empowering Progress.*

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Gamma Spectroscopy Software Updates: What's New and Why It Matters

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Inside Sales Manager

Mirion Connect | Annual Users' Conference 2026

Henderson, NV

Daily Check-In:

Thursday, June 18th



*Please take a moment
to check in for your
Thursday sessions.*

Agenda

NEW

- **Overview of Lynx II® Multi Channel Analyzer**

- Overview
- V1.1 firmware
- V1.2 firmware

NEW

NEW

- **Genie™ Spectroscopy Suite**

- Genie V4
- Overview of licensing
- Genie Review Client
- Genie 4.1

NEW

NEW

- **Apex-Gamma™ Lab Productivity Suite**

- V1.5.1
- V1.6
- Apex-Guard option V1.2

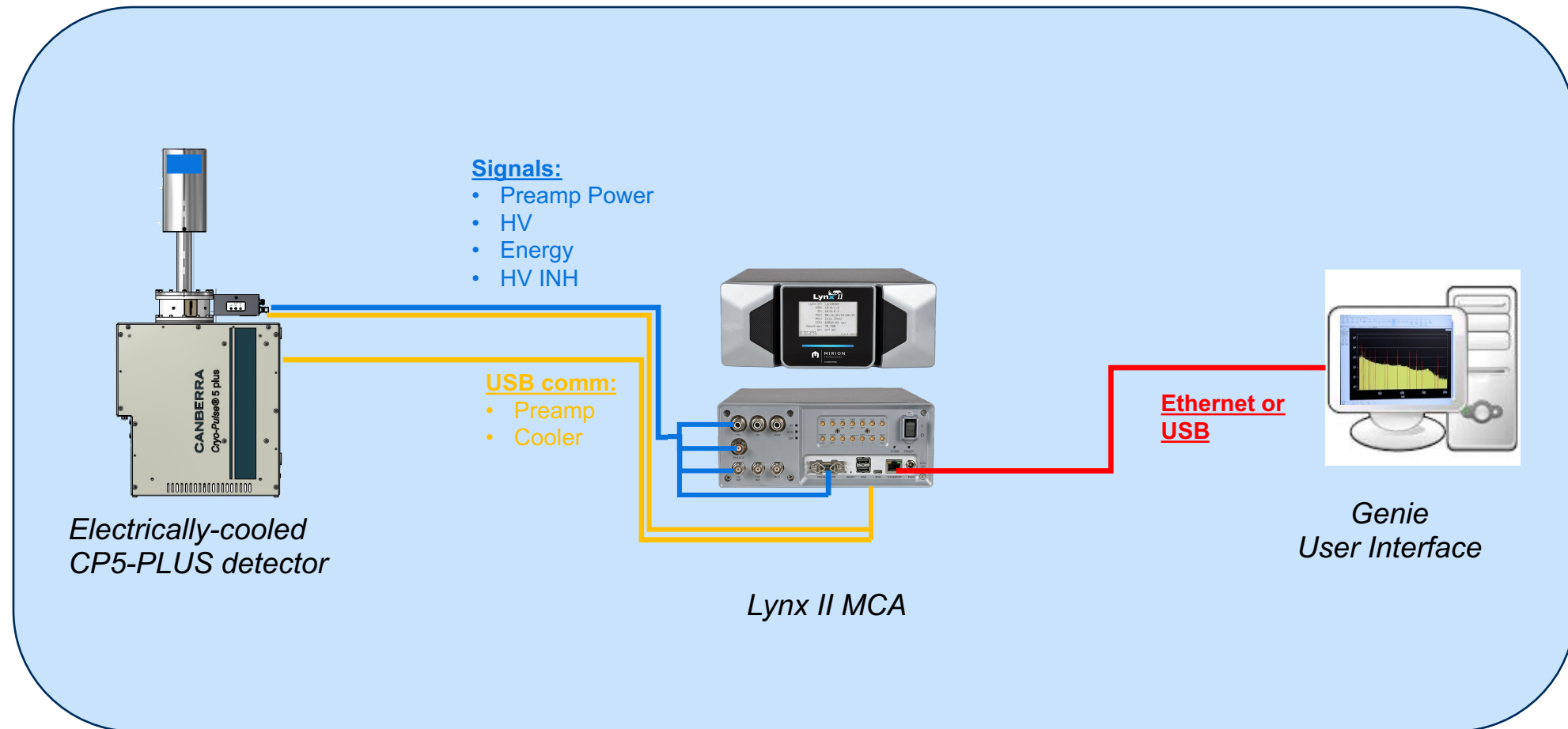
- **QA/Discussion**





- *Lynx II[®] – Launched in July 2022*
 - *Replaced the highly successful Lynx MCA after 14 years*
 - *Built on the Lynx technology and success*
 - *Updated design, incorporating many user comments and feedback*
 - *Designed for the future of integrating spectroscopy systems*
 - **Lynx II to be the “hub” of future gamma spec systems**

Lynx II as the central data hub



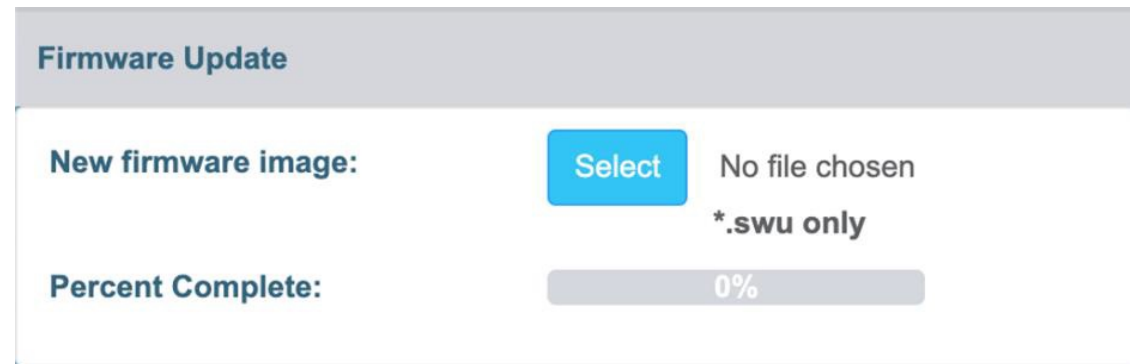
Cyber Security



- All software technologies within the firmware are scanned using a suite of vulnerability tools.
- Firewalls are in place.
- **Transport Layer Security (TLS)** - authenticates and encrypts communication interfaces.
- **Trusted Execution Environment (TEE)** - ensures the integrity and authenticity of all firmware components.
- Browser communications are secured via authentication and encryption.
- Each update of firmware is reviewed for potential security vulnerabilities and enhancements.

Future Ready

- Lynx II was designed with future expansion and upgrades in mind.
- Future updates can be performed via the web interface with the click of a mouse.
- Offering a new paradigm of regular firmware and feature updates



The screenshot shows a web interface titled "Firmware Update". It contains two main sections. The first section, "New firmware image:", features a blue "Select" button and the text "No file chosen" and "*.swu only". The second section, "Percent Complete:", features a progress bar that is currently at 0%.

Firmware Update	
New firmware image:	Select No file chosen *.swu only
Percent Complete:	0%

Lynx II V1.1

- 1st Step to Lynx being the central hub of the gamma spec system.
- Integrated IPA SOH monitoring
- Integrated Cryocooler SOH monitoring
- Zero configuration setup – Simply connect the cooler or preamp to the Lynx II and the MCA will do the following:
 - Automatically connect to the devices.
 - Start collecting data from each device.
 - Store data to a time series database.



Integrated IPA/Cryo-Cooler Integration



Lynx II

Preamp

Data

Settings

Preamp Parameters

Name	Value
Model	ipa
Charge Loop Avg DC Level	0.76
Detector Leakage Current	215
FET Backgate Voltage (ADC)	1.42
FET Drain Voltage (ADC)	0.048

Cooler Parameters

Name	Value
Model	cp5
Cold Head Temperature (°C)	19.9
Cold Tip Set Point (°C)	-185
Cold Tip Temperature (°C)	19.48
Compressor Temperature (°C)	18.9

Preamp & Cooler

Data

Settings

LN2 Low Alarm Setpoint (%)

-

4

+

LN2 High Alarm Setpoint (%)

-

95

+

Output Stage Gain

1

▼

HV Inhibit on LN2 Alarm☒

New AEM Firmware

Select

No file chosen

New DEM Firmware

Select

No file chosen

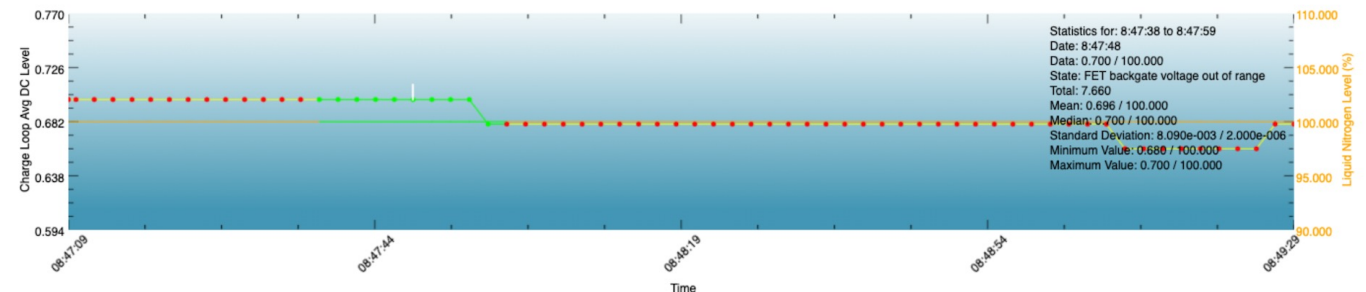
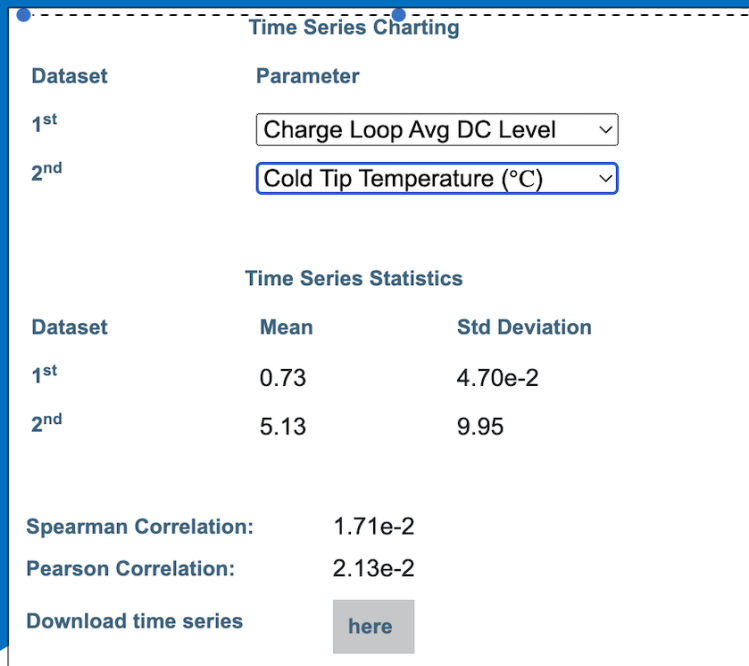
Cooler Synchronize Time:

Now

Time Series Plot



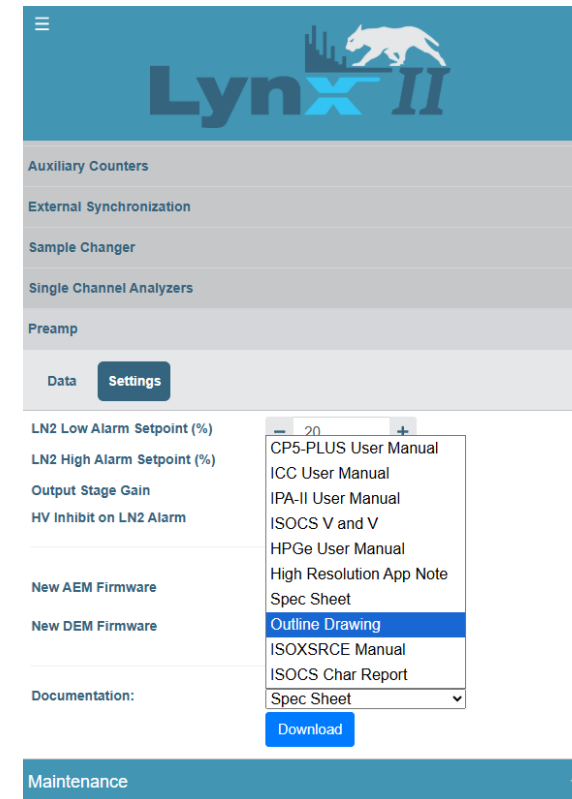
- Time series chart is available for displaying parameter variations.
- Two parameters from different or same instruments may be viewed in the same chart for comparing data trends.
- Important statistics are displayed about each of the charted parameters.
- Automated download of data is available via the new FTP options



V1.2 Firmware

NEW

- 2nd iteration of firmware update
- Further integration with IPA II
 - Ability to access documents and files within the IPA.



Attend “The latest in Germanium detector advancements” with Dieter Pauwels at 10:30 today

Advancing Radiation Safety.
Empowering Progress.

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V1.2 Firmware

Preferences

Acquisition

Hardware

Maintenance

Network Settings

Ethernet (IPv4) Ethernet (IPv6) UPnP Web USB FTP

MAC address: 00:14:2D:A4:BE:AA

Assigned address: link-local=fe80::214:2dff:fea4:beaa
global=fd05:e25:8607::1

Static address: fd05:0e25:8607::1

Gateway: 0000:0000:0000:0000:0000:0000:0000:0000

Subnet prefix: 64

Enable DHCP: Off

Save

- Internet Protocol Version 6 - IPV6
- Requirement for DOE facilities
 - Office of Management and Budget Memorandum M-21-07
 - DOE O 200.1A order August 2023
 - <https://www.directives.doe.gov/directives-documents/200-series/0200-1-border-a-chg2-ltdchg/@images/file>

NEW

IPv4 vs IPv6

Feature	IPv4	IPv6
Address Size	32 bits	128 bits
Address Format	Dotted decimal (e.g., 192.168.1.1)	Hexadecimal (e.g., 2001:0db8:85a3:0000:0000:8a2e:0370:7334)
Address Space	About 4.3 billion addresses	About 340 undecillion addresses

Availability of V1.2



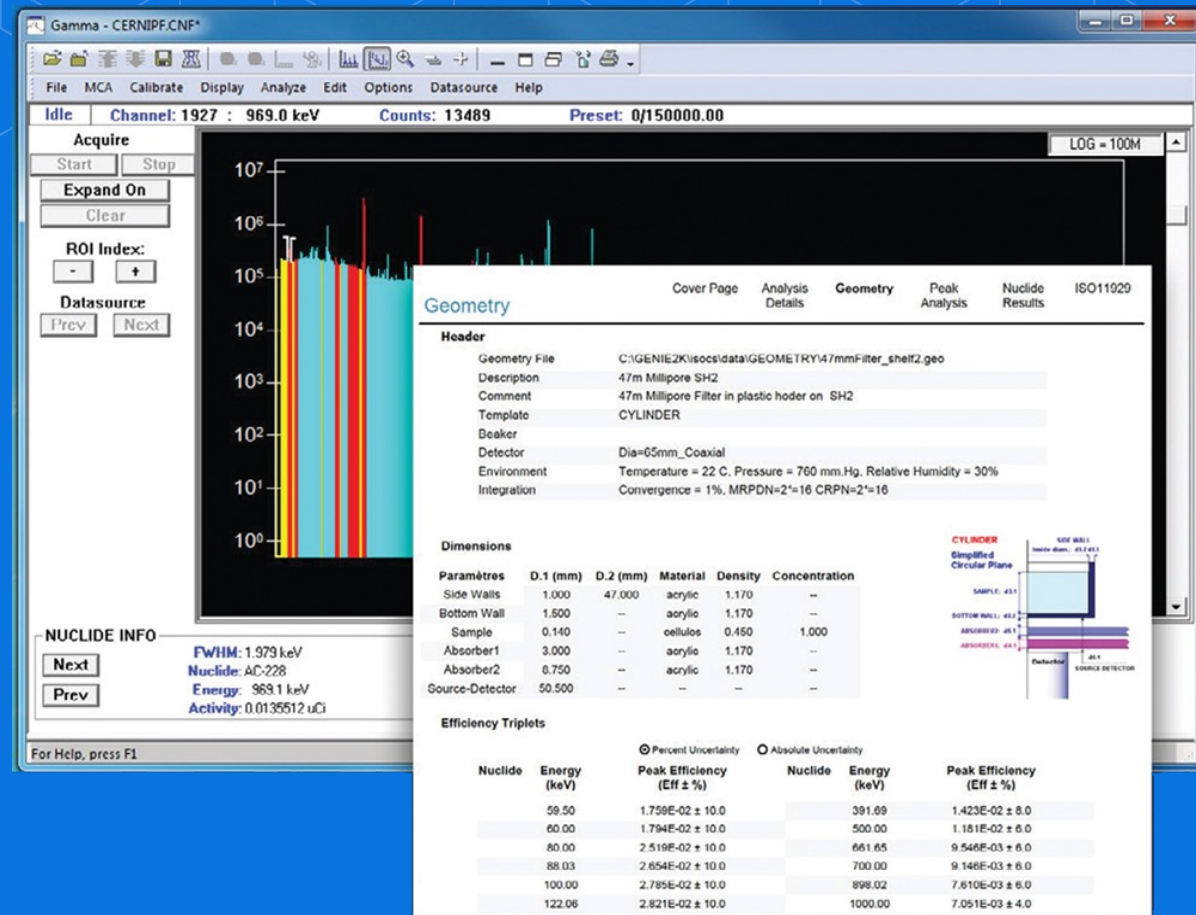
NEW

- Includes:

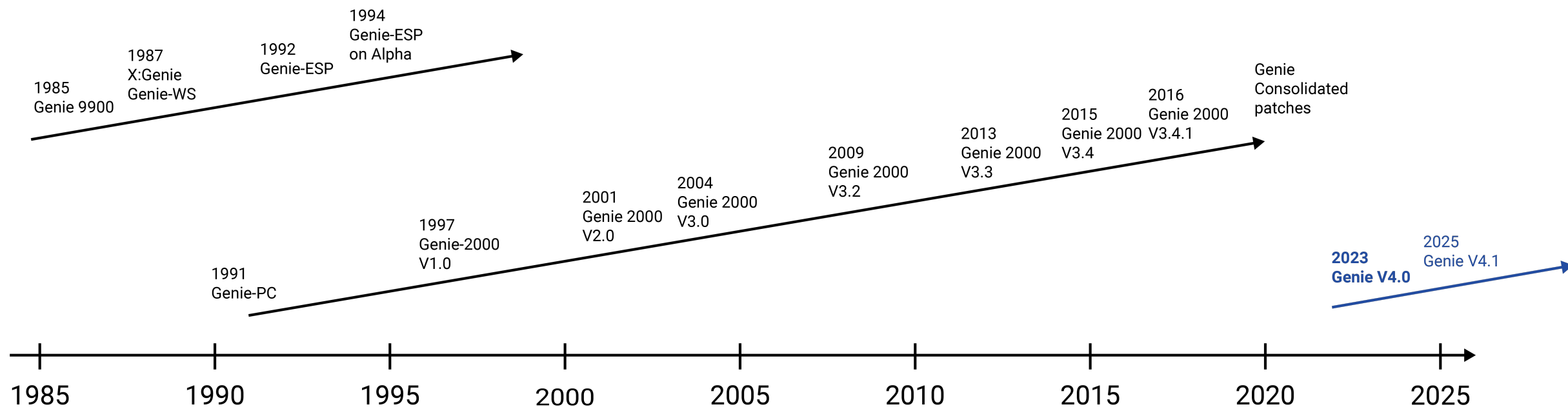
- IPA functionality
- IPV6
- Misc bug fixes and enhancements

- Current Lynx II users will receive a communication soon
- Will be available for download on Mirion.com within the next few weeks
 - <https://www.mirion.com/products/technologies/spectroscopy-scientific-analysis/gamma-spectroscopy/detector-electronics/lynx-ii-digital-signal-analyzer>

Genie™

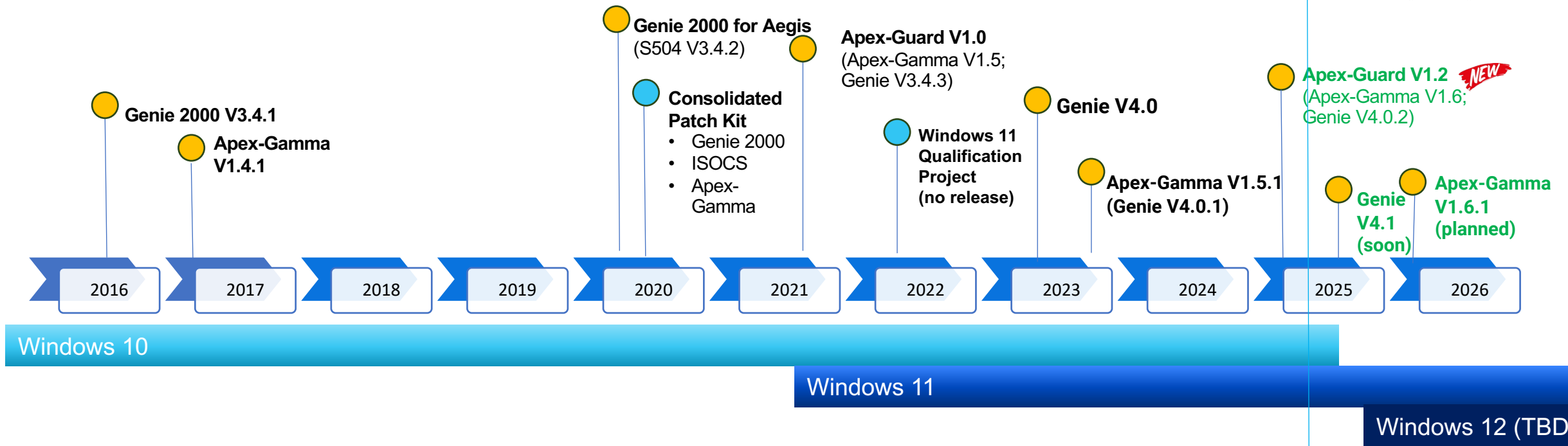


A brief history of Genie applications



"Evolving our Spectroscopy Platform"

Genie & Apex-Gamma Past 10 years



Genie 4.0 Released June 2023

“Evolving our Spectroscopy Platform”

What’s New:

- *Exciting User Experience improvements with new Interactive Reports*
- *Driving more accurate and robust results with new algorithms*
- *Improving automation with new scripting options – Python!*
- *Continuous Support & Updates with new purchasing options and electronic downloads*

Genie V4.0

Released July 2023

- *Interactive Reports for increased usability and streamlined decision making*
- *Python Integration for increased automation*
- *Improved Installation*
- *>40 addressed SPRs*
- *N42 File Support*
- *Integrated Aegis Support*
- *New Analysis Algorithms*
- *New Licensing*

Expand nuclide summary to review line activities

Compact view for easily viewing results

Nuclide Results

[Cover Page](#)

[Analysis Details](#)

[Geometry](#)

[Peak Analysis](#)

Analysis Library: C:\GENIE2K\CAMFILES\STD\LIB.NLB

Total Library Nuclides: 109

ISOCs Geometry File: C:\GENIE2K\isoc\data\GEOMETRY\Laboratory\47mmFilter_shelf2.geo

[Expand All](#)

☒ Percent Uncertainty

☐ Absolute Uncertainty

☒ Display

☐ Hide

Identified Nuclides

9

Nuclide	NID	Confidence	WT Mean Activity (Bq/Unit ± %)	Decision Level (Bq/Unit)	MDA (Bq/Unit)
CO-57	+	1.00	8.388E+02 ± 7.31	5.937E+00	1.225E+01
CO-60	+	1.00	1.901E+03 ± 2.85	4.908E+00	9.994E+00
Energy (keV)	Intensity (%)	Line Activity (Bq/Unit ± %)	Coinc. Corr.	Decision Threshold (Bq/Unit)	Line MDA (Bq/Unit)
1173.22*	100.00	1.917E+03 ± 4.04	0.969	6.234E+00	1.265E+01
1332.49*	100.00	1.885E+03 ± 4.04	0.968	4.906E+00	9.994E+00
SE-75	X+	0.34	----	1.378E+01	2.819E+01
Y-88	+	0.99	3.969E+03 ± 3.36	7.003E+00	1.447E+01
CD-109		1.00	3.299E+04 ± 10.44	1.410E+02	2.916E+02
SN-113		0.99	2.348E+03 ± 6.80	1.380E+01	2.827E+01
CS-137		1.00	1.138E+03 ± 6.04	6.314E+00	1.285E+01
CE-139	+	1.00	1.288E+03 ± 8.03	9.553E+00	1.951E+01
HG-203		0.96	2.889E+03 ± 8.12	3.095E+01	6.337E+01

Unidentified Library Nuclides

100

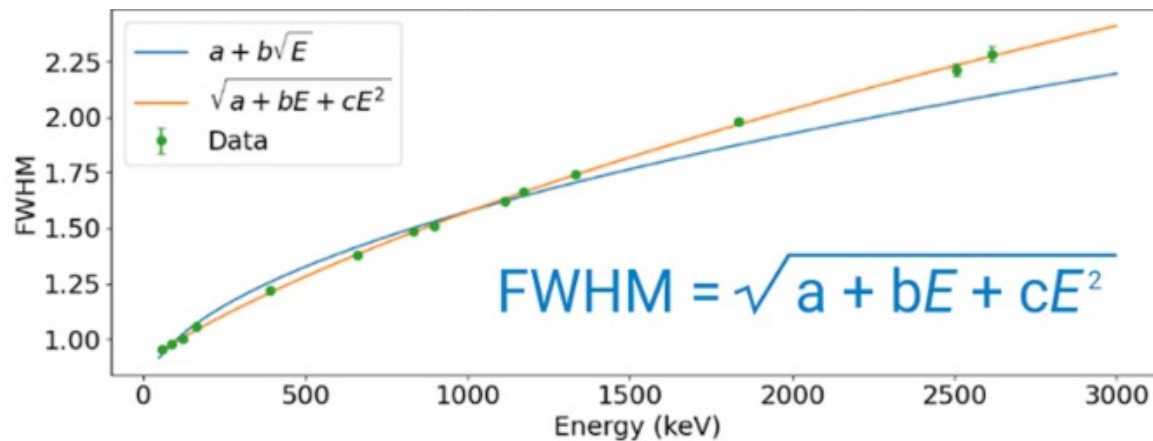
Nuclide	Decision Level (Bq/Unit)	MDA (Bq/Unit)
BE-7	---	---
NA-22	---	---
NA-24	---	---
CL-38	---	---
K-40	9.204E+01	1.862E+02

Compact view
for easily
viewing results

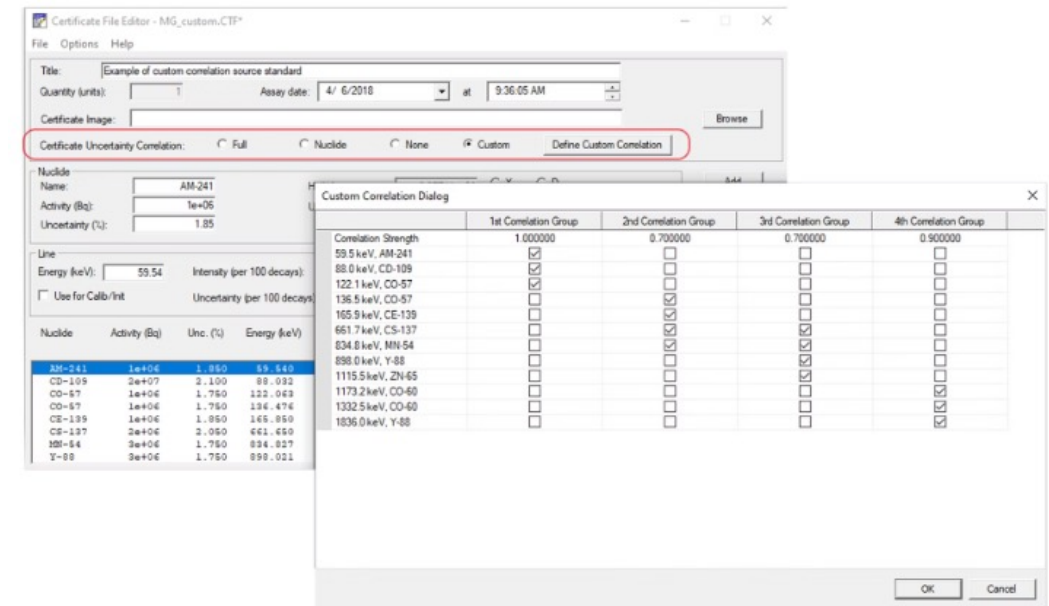
Genie V4.0

Algorithm Enhancements

- Full Width Half-Max (FWHM) resolution calibration curve now supports a more precise model.
 - Most relevant for MDAs at very high or low energies



- Nuclide Activity Uncertainties can now take into account correlations in calibration standards.
 - Most relevant for very high precision measurements



Genie V4.0

Licensing Changes

The screenshot shows the 'MIRION Software Licensing' window. It has a title bar with 'MIRION' and 'Software Licensing'. The main content is divided into three sections: 'Status Information', 'Licensee Information', and 'Mirion Support Information'. The 'Status Information' section shows 'Status: License Activated', 'Expiration Date: 6/22/2026 8:00:00 PM', 'License Number: 200328', and 'Licensed Features: Genie-Multi-3yr, Apex-Gamma, ISOCS'. The 'Licensee Information' section shows 'Licensee: Kara Phillips', 'Company Name: MIRION TECHNOLOGIES (CANBERRA) INC - MERIDEN', and 'Email: kphillips@mirion.com'. The 'Mirion Support Information' section shows 'Installation ID:', 'Installation Name:', 'Salesforce order number:', 'ERP Order #:', and 'Source: Internal Users Tenant'. At the bottom, there are four buttons: 'Activate License', 'Update License', 'Deactivate License', and 'Close'.

- Download common software installation(s).
- Install the Features you need (i.e., ISOCS, Apex-Gamma, Apex-Guard).
- Use the 90-Day Trial Period for evaluation and configuration.
- Activate license for the specific computer using unique License ID & password.
- Renew as needed.

Choose your model, then choose your license:

1-YEAR LICENSE

Predictable annual pricing ideal for Operational Expense (OpEx) budgeting.

3-YEAR LICENSE

Locked-in pricing for subscription duration, with no need for annual repurchase.

PERPETUAL LICENSE

Upfront purchase option for those unsure about a subscription.

Basic Spectroscopy
Acquisition

Complete
Spectroscopy
Acquisition &
Analysis

Mathematical
Efficiency
Calibrations

Genie 2000

- S500/S502/S504 Genie Basic

- S500/S502/S504 Genie Basic
- S501 Gamma Analysis
- S505 Quality Assurance
- S506 Interactive Peak Fit
- S509 Alpha Analysis
- S561 Genie Batch Commands
- Genie-FieldPro

- S573 ISOCS Software
- S574 LabSOCS Software

Genie 4.0

GenieLite Software
(GenieLite-Single or GenieLite-Multi)

The Genie Spectroscopy Suite
(Genie-Single or Genie-Multi)

“ISOCS” Software



Genie™ 4.0 and Apex® Products

Operating System and Database Qualifications

Windows 11 Compliance

Status as of May 2025

Base Model / Name	Version	Legacy Product Model(s)	Windows 10	Windows 11	Windows Server 2019	Windows Server 2022	Windows Server 2025	SQL Server 2019	SQL Server 2022	Oracle 19c
Genie / Genie™ Spectroscopy Suite	4.0	S500/S502/S504 Genie Basic S501 Gamma Analysis S505 Genie Quality Assurance S506 Genie Interactive Peak Fit S509 Alpha Analysis S561 Genie Batch Programming Genie-FieldPro™ Software	✓	✓	✓	✓	✓			
GenieLite / GenieLite Basic Spectroscopy	4.0	S500/S502/S504 Genie Basic	✓	✓						
ISOCS / ISOCS™/LabSOCS™ Mathematical Efficiency Software	4.5	S573 ISOCS S574 LabSOCS	✓	✓	✓	✓				
Apex-InVivo / Apex-InVivo™ Desktop / Workstation	1.3	S734 Apex-InVivo Workstation	✓	✓				✓		
AIV-Server / Apex-InVivo Server Software	1.3	S738 Apex-InVivo Server				✓		✓	✓	
AIV-Review / Apex-InVivo Review Client	1.3	S735 Apex-InVivo Review Client		✓						
Apex-Alpha / Apex-Alpha™ Software	1.4	S770 Apex-Alpha Desktop S771 Apex-Alpha Server S772 Apex-Alpha Client	✓	✓	✓			✓		
MGAU / Multi-Group Analysis for Uranium (MGAU™) Software	4.3	S507 MGAU		✓						
MGA / Multi-Group Analysis (MGA™) Software	10.1	S508 MGA		✓						
Apex-Gamma / Apex-Gamma™ Software	1.6	S700 Apex-Gamma Desktop S701 Apex-Gamma Server S702 Apex-Gamma Client S703 Apex-Gamma NPP Option	✓	✓	✓	✓	✓	✓	✓	✓
Apex-Guard / Apex-Guard™ Option	1.2	S707 Apex-Guard	✓	✓	✓	✓	✓	✓	✓	

Product qualification, at time of qualification, for each indicated operating system and configuration is in compliance with the following standards: ISO 9001, ASME NQA-1c-1992, ASME NQA-2-1990 Part 2.7, and latest revision of IEEE 730.1.

Always note: EPA 9000 software will continue to service EPA Model 9 & 4 until further notice.

NEW!!! Genie-Review “Data Review” Model

NEW

- Intended for reviewing and reanalyzing spectra
- Analysis for:
 - Multiple peak searches,
 - Background Subtract,
 - Energy and Efficiency Calibration,
 - NID w/ Inter. Corr.,
 - Cascade Summing Corr.,
 - Wt. Mean Activity,
 - MDA,
 - Alpha Analysis,
 - Quality Assurance,
 - Interactive Peak Fit
- Software provided by electronic download
- For use on one computer or VM only via electronic licensing
- Qualified on Windows 10 and 11
- Does not support detector acquisitions

What's coming next?

Genie 4.1

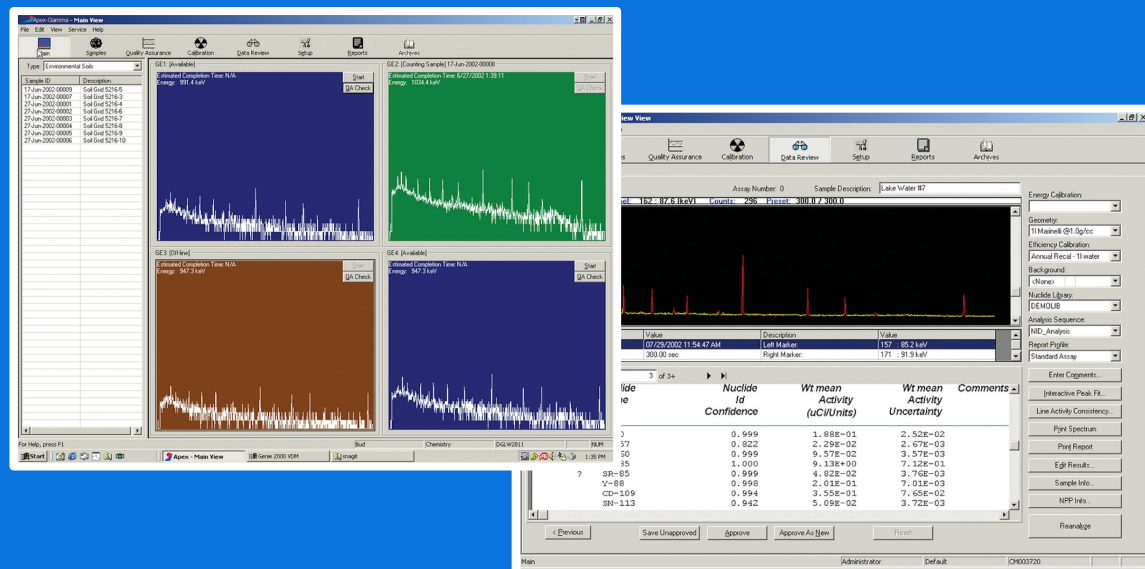
Late 2025

NEW

- **NEW: “Recursive” true coincidence summing corrections**
 - Fully support all types of gamma-gamma and gamma-Xray coincidences in well geometries
 - Improve several “outlier” nuclides in other non-well geometries
 - Extends correction to K x-rays and summing with L x-rays
 - Easier to add new nuclides to the correction (COI) library
 - Allow for propagation of uncertainties for each nuclide’s correction
- **Updated Nuclide Library Files** with traceability and current pedigree
 - Updates to CAM file
- Genie 4.1 will also build upon Genie 4.0 features
 - Including **Python Scripting improvements**
 - Updates including the latest Python versions.
- **Internet Protocol Version 6 - IPV6**
- And more....
- **Genie 4.1 will be available for all active subscription licenses**



Apex-Gamma

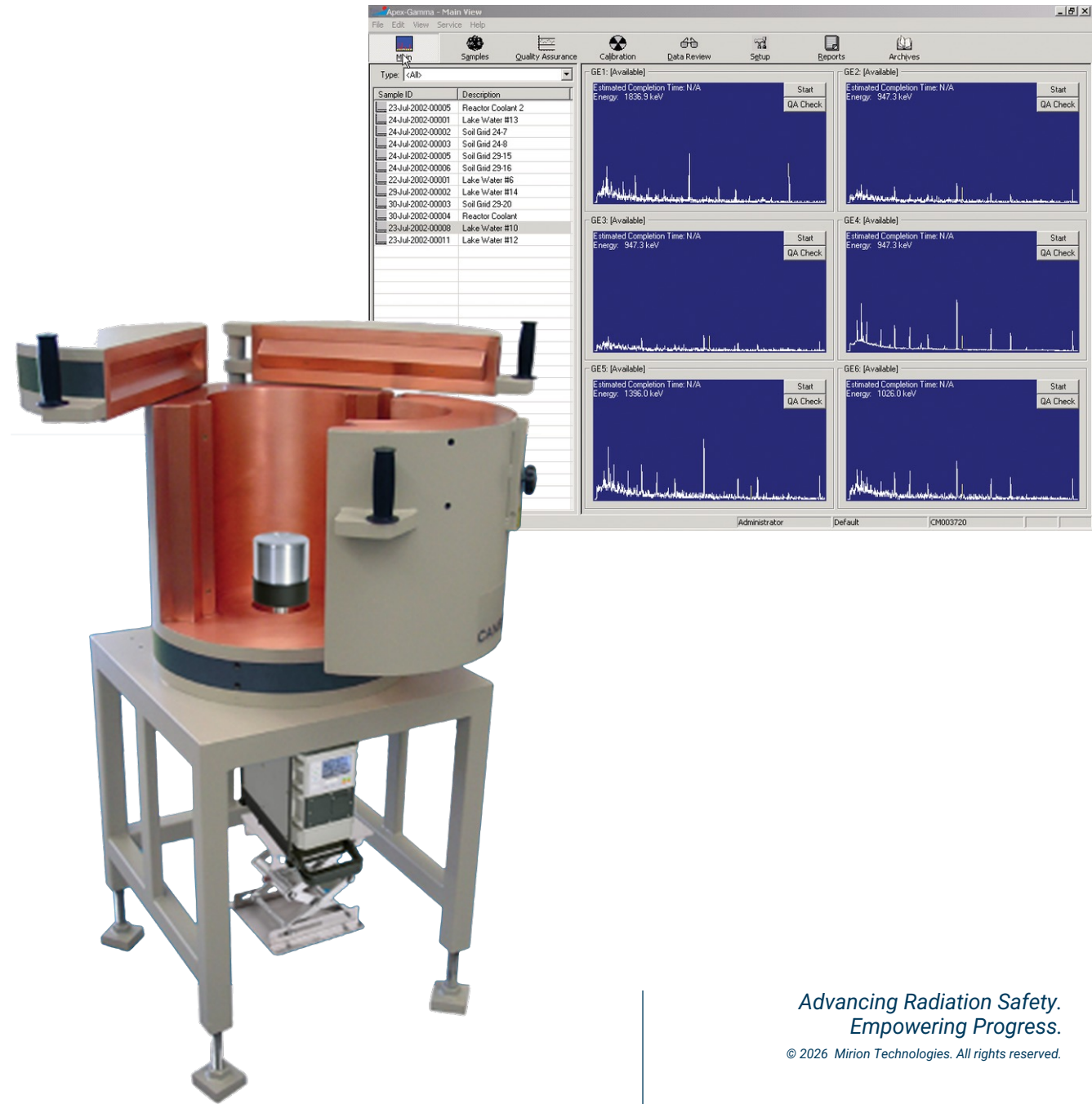


Apex-Gamma

Version 1.5.1

Released December 2023

1. Support for Correlations in Calibration Standards
2. Support for new FWHM calibration fit
3. Support for Python Scripting
4. “Analyses” data review history
5. Aegis™ MCA support
6. Consolidated installation and electronic licensing



Apex-Gamma

Version 1.5.1

(Continued)

Apex-Gamma V1.5.1 Resolved Software Performance Reports	
SPR Number	Description
P8470511	An issue was reported where the Apex-Gamma report multiplied the continuum counts in the peak area by the error multiplier. This is incorrect and was also inconsistent with the value displayed by Genie reports. If the error multiplier was set to 1, no discrepancy is seen. Additionally, this affected only the reported continuum counts. The calculation of peak area or The display of continuum counts in the / updated to not be multiplied by the error
H2699092	An issue was reported for incorrect disp the setting applied for Apex-Gamma's V, specifically occurred only when the optic and fill height was selected. The report c for the computed density and fill height, to display the sample-specific density ar
G1291294	An issue was reported that caused a sec generated in a report. This occurred whi acquisition function was enabled in an A is recommended when using Cosmic Gu suppression systems. This has been adx
H6078049	The Apex-Gamma application has been i Server installations requiring Windows a
G2232013	Several issues were reported that the Ap Oracle MGinstall fails when retrieving th Investigation revealed that an incompati (Versions 19.1.0.0.20190522 or earlier). The Apex-Gamma installer was updated and provide more meaningful error mesi
G2785152	Occasionally, an "Efficiency Count to Pei complete successfully. This has been a
H7571602	For systems running an XML Import fun it was reported that the partial sample ic cause of this was due to the broadcast f routine to the Apex-Gamma application i SampleSetup record is detected by the C been addressed.

Genie V4.0 Resolved Software Performance Reports	
SPR Number	Description
H4989776	Addresses an issue where Apex-Gamma would crash following a specific set of steps when selecting Shape option in calibration review.
H1624093	Addresses an issue where it was not possible to perform LABSOCS efficiency calibration when a space is used in the Detector.txt name
M9997482	Issue with initialization of variable geometry templates, where the symptom of failure is the error message "Variable sample material is not supported for this geometry" in geometry setup screen.
W8315480	Issue with initialization of non-English local variable geometry templates, where the symptom of failure is that the variable geometry icon in the Apex geometry setup screen would fail to launch.
W8315480	Corrects overestimated uncertainties for variable source-detector distance.
D2553521	Issue with custom beaker templates used in variable geometry setup for European locals. The symptom of failure includes an error message when trying to define the variable geometry limits of fill height by mass or volume.
J4324940	Inconsistent Peak Area Fitting for Significantly Large Multiplets

Genie V4.0 Resolved Software Performance Reports	
SPR Number	Description
H10429922	On a customer-specific configuration system, the Apex spectral plot window does not display
P10690089	Apex-Gamma limits control of Sample changer to one designated workstation. This has now been updated to allow control of a sample changer from any Apex-Gamma workstation.
G2785152	Addresses an issue for when an efficiency count to a specified area in each peak hangs after the minimum preset is reached. This occurs when not all the peaks in the certificate have reached the specified peak area after the minimum count time and all the certificate peaks are present in the spectrum.
H4846189	Addresses an issue where Apex-Gamma would crash at the start of a count on some systems.
H1417792	Addresses an issue where Apex-Gamma would crash when using cascade summing correction on an efficiency calibration in some situations.
G9511329	The QA chart investigate and boundary limit lines were not displayed correctly.

Apex-Gamma V1.5.1 Resolved Software Performan	
SPR Number	Description
W944407	In Apex-Gamma 1.4, an update was appl certificate name and date with an efficie Some customers reported that adding ti date present on the header of the analysi Therefore, the certificate name is now si an analysis report and is only displayed i efficiency confirmation count.
P2391927	In Genie 4.0, a bug was introduced for ef insufficient number of data points when use was used. If there are only 3 calibration points for the high part of the polynomial, an error message was incorrectly generated and prevented a fit from being applied. This is now resolved.

7. Consolidation of many previous patched issues
- Previously released as the *Genie/Apex-Gamma Consolidated Patch Kit* in 2020.
8. Improvements in network communications
- Previously released as part of the “*Tenable*” patch release to mitigate conflicts with the common antivirus software.
9. Apex-Guard application as an integrated option for enhanced data integrity
- Originally released as a standalone application in 2021.

Apex-Gamma V1.5.1

"Analyses History" Feature

Apex-Gamma - Data Review View

File Edit View Service Help

Main Samples Quality Assurance Calibration Data Review Setup

Normal

Sample ID: 19-Jun-24-200008 Assay Number: 0 Sample Description: tal

☒ Spectrum ☐ Report ☐ Efficiency Sample Type: Li

Idle VFS=64 Channel: 2048 : 204.8 (keV) Counts: 0 Preset:

View Analysis

Sample Info... ASF... Reanalyze

Description	Value	Description	Value
Start Time:	6/19/2024 5:04:47 PM	Left Marker:	2047 : 204.7 keV
Elapsed Live:	100.00 sec	Right Marker:	2048 : 204.9 keV
Elapsed Real:	100.50 sec	Centroid:	2048 : 204.8 keV
Dead Time:	0.49%	Area:	0 ± 0.00%
Preset Live:	100.00 sec	Integral:	0
Preset Real:	0.00 sec	Gaussian Ratio:	0.000

< Previous Save Unapproved Approve Approve As New Reset Analyses Print Spectrum Print Report

Main fre GuardTest MFR-V10-GUARDTS Peak Labels ON

Analyses for sample 19-Jun-24-200008[illegible][View Analysis](#)

Cancel

Sample Info...

ASF...

Reanalyze

Apex Gamma Version 1.6

released March 2025



▪ Count to Peak Area

- Define the energy of a peak and determine the peak area associated with that energy improving the precision of sample analysis.

▪ Acquisition Start Delay

- Start a count at a fixed date and time, allowing users to schedule counts relative to the sample date for up to 3 days.
- Enhances the flexibility of sample analysis timing and ensures that counts can be accurately scheduled and executed.

▪ Cascade Summing Corrections for Lu-177 and Rb-82 now supported

- Added correction factors for Lu-177 and Rb-82.
- Rb-82 are based on data from ENSDF, March 2019.
- Lu-177 are based on data from ENSDF August 2019.

▪ Decays Per Minute unit now supported

- Decays Per Minute (DPM) units as a reportable activity.
- ## ▪ 10+ bug fixes and enhancements
- ## ▪ Significant improvements in the speed of reanalysis in Data Review.

Count to Peak Area

Count Parameters

☐ Time Preset

☐ Count to MDA

☒ Count to Peak Area

Energy: Area:

☐ Count to Impurity Limit

Time Limits

Min: Max:

Preset Options:

☒ Live Time ☐ Real Time

Preset Units:

☒ sec ☐ min ☐ hrs

Preset Overrides:

☐ Start of Count

☐ Sample Definition

- Supports counting to a specified area for a specific peak energy
- Available in the “Procedures Setup” section
- Specify the peak energy; the analysis then uses the largest peak within the ASF tolerance value
- Counting behavior will:
 - Go to the minimum to the count preset
 - Then estimates how much time is required to reach peak area
 - Iterates estimations to reach this value
 - Will not exceed the maximum time limit

Apex-Guard (option)

Gamma Spectroscopy for your regulated Count Room

Confidence in Results

- *Features & controls necessary for compliance to U.S. FDA Title 21 CFR Part 11*
- *Role-based security with Windows User logons and automatic timed logoffs*
- *Enhanced security for analysis, device control, and data processing files*
- *Comprehensive audit logs with change control and auditing capabilities*
- *Electronic Signatures*
- *Automatic timed log-off feature*

Scales with your Needs

- *Premium local support options and software updates with subscription service*
- *Training classes, IQ/OQ services, and startup assistance available*



Apex-Guard Option Version 1.2

released March 2025

NEW

- Builds on Apex-Guard V1.0/V1.1 to introduce standardized and robust radionuclidic impurity analysis and reporting
 - Novel new algorithm to determine the “Maximum Potential Percent Impurity” in a gamma spec analysis
 - Includes concise and targeted report, including comparison to user-defined limits and total radionuclidic purity.
 - Ability to report at multiple reference dates (i.e., time of assay and time of future injection)
 - Other counting features, such as count to MPPI and delayed start for a specific time
- Combine with Application Setup Assistance to fully configure libraries and analyses for a specific application

Results
for first
reference
date

Results
for second
reference
date

Analysis Report for Sample ID 12346 10/4/2024 4:35:42PM Page 2 of 2
Impurity analysis at acquisition time and two weeks later

Radionuclide Impurity Report

MPPI Activity Reference: Activity of Primary Radionuclide only
Alpha Confidence: 5.000 %
Nuclide Library: LU177_INDIRECT.NLB

Reference Date:	10/4/2024 4:28:07PM					
Radionuclide	Impurity Analysis Category	Activity (kBq/units)	Activity Uncertainty at 1.0 sigma	MDA / Reference Activity	Maximum Potential Percent Impurity	Percent Impurity Limit
Lu-177	Primary	4.543E+02	2.14E+00%	-----	-----	-----
Yb-169	Impurity	-----	-----	0.012%	0.005%	0.010%
Yb-175	Impurity	-----	-----	0.002%	0.001%	0.100%
Sum of Impurities :					0.006%	0.100%
>> Sample analysis results are below the specified radionuclide impurity limits at reference time 10/4/2024 4:28:07PM.						
>> Minimum Radionuclidic Purity :					99.994%	

Reference Date:	10/18/2024 4:28:07PM					
Radionuclide	Impurity Analysis Category	Activity (kBq/units)	Activity Uncertainty at 1.0 sigma	MDA / Reference Activity	Maximum Potential Percent Impurity	Percent Impurity Limit
Lu-177	Primary	1.055E+02	2.14E+00%	-----	-----	-----
Yb-169	Impurity	-----	-----	0.037%	0.016%	0.010%
Yb-175	Impurity	-----	-----	8.86E-04%	4.60E-04%	0.100%
Sum of Impurities :					0.017%	0.100%
>> Minimum Radionuclidic Purity :					99.983%	

The maximum potential percent impurity (MPPI) is the greatest relative percent activity of the impurity compared to the activity reference at the alpha confidence for this measurement, taking into account their respective uncertainties. There is a 95.00% probability that the true impurity percent is at or below the MPPI.

Upgrading from **Genie 2000** to **Genie V4.0** or **Apex-Gamma V1.4.1** to **Apex-Gamma V1.5.1** or **1.6**

- *Backwards Compatibility*
 - *All core functionality remains*
 - *All previous analysis results reproducible*
- *Qualification Procedure Changes*
 - *Installation is updated*
 - *Licensing is updated*
 - *The rest, including most menu options, are consistent with previous Genie/Apex versions.*
- *Ordering changes*
 - *Same software but with consolidated sales models*
 - *Availability of subscription*
- *Sustaining Updates:*
 - *60+ SPRs (bugs) addressed*
 - *Incremental improvements in network communications*
- *New Features*

Survey for:

Gamma Spectroscopy Software Updates: What's New and Why It Matters



*Please take a moment
to fill out a short survey
on this session.*

Thank you

