

GABI NOVA

RADIO FLOW MONITOR FOR SPECT AND PET

The best choice for isotope detection and flow analysis.

- ✓ LARGE DYNAMIC RANGE
- ✓ HIGH SENSITIVITY
- ✓ VERSATILE
- ✓ GxP / CFR PART 11 COMPLIANCY



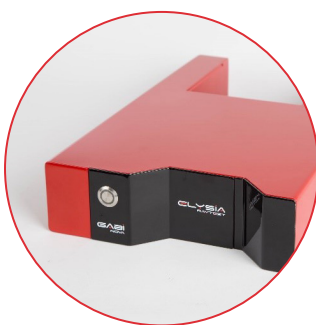
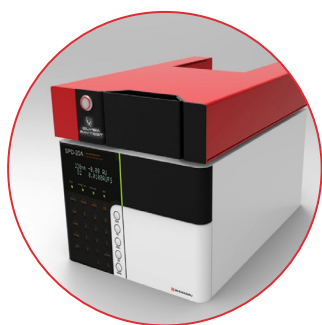
The GABI Nova is a versatile state-of-the-art radio flow monitor. A large range of detector probes allow the measurement of nearly every isotope, ensuring the GABI Nova is ideally suited for radio flow measurements in nuclear medicine, SPECT or PET laboratories. Multiple flow cells with different volumes in conjunction with different probes enable the system to be configured for all types of activities and energy ranges. The right combination will ensure the best detection capabilities and the best signal to noise ratio for each application.

Flow monitoring of radiolabelled compounds separated by chromatographic techniques has been established as one of the most powerful tools in many medical chemistry related areas. The GABI Nova represents 30 years of know-how in flow detectors for Radio HPLC. Different cell sizes can be used to adapt for flow rates and signal intensities.

Automatically detects and logs system settings, reducing operator errors and ensuring fully traceable, 21 CFR Part 11-compliant documentation.

The GABI Nova range was designed to be as flexible and adjustable as possible, to ensure the highest performance and the best compromise depending on your actual application.





Models

We have a complete range of digital controlled probes that use different scintillator materials and detector technologies. The GABI Nova has been developed to ensure a large versatility and the best possible integration into your radio-HPLC system. To optimize lab space we propose different housing. The general housing is built to carry the entire lead castle and is placed directly under the lead shielding. Two other housings have been designed to incorporate the GABI Nova housing directly into the Agilent or the Shimadzu HPLC tower.

Detectors

The flow rate, the type of activity, and the amount depend on your application and will set the physical limit of the measurement. To get the best possible performance for all types of activities and isotopes, it is mandatory to adjust the detector setup to your application. We have a complete line of new-generation probes, using different scintillator materials, well-established PMT tubes as well as totally new digital detection technologies.

The right combination of detector, scintillator, cell volume and shielding allow the best detection for each application. With our one cable control and power supply simply change the detector/probe and the system will recognize the type and the serial number of your detector. This will give you perfect documentation of your setup and enhance your GxP tools. Gabi detectors allow advanced control and diagnostic to ensure a better performance and enable remote diagnostics.



Model	Energy range	Application	Shielding	Scintillator
Mid Energy	60-600 keV	Analytical HPLC	5 cm	2x2» crystal
High Energy	60-1300 keV	Analytical HPLC	5 cm	3x3» crystal
PET Standard probe	for PET	Analytical HPLC	Yes	Polymer scintillator
Prep probe	60-600 keV	Preparative HPLC	Yes	Small crystal
PET Prep probe	for PET	Preparative HPLC	No	Polymer scintillator

Software



Direct control with our GINA software ensures digital signal transfer and a complete integrated solution according to GMP/GLP standards. GINA gives full control of the GABI Nova, digital transfer and data storage as well as the possibility to control the entire HPLC. The GABI Nova can also be added as a standalone system to existing radio-HPLC systems in combination with software packages from other suppliers. The GINA software includes background subtraction, a half-life-time correction and a dead time correction.



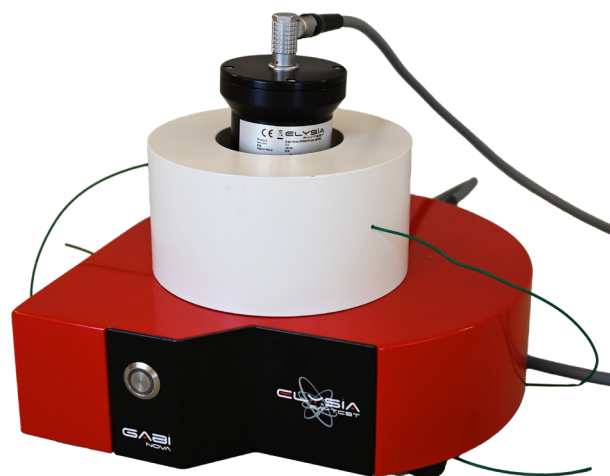
GABI Nova lead shielding

We provide an adapted lead shielding for all our probes. The standard lead castle is made of 4 painted lead rings of 5 cm width. It allows to reach background inferior to 10 CPS in standard laboratories. As the lead castle is made of rings, it is easy to move or adapt.



GABI Nova extended lead shielding

The extended lead castle for the GABI Nova has been designed for the mid energy probe. The shielding is made of lead rings that surround completely the detector, including the detector, to block the emission coming from above the detector. This extended shielding is useful in laboratory where the ambient radioactivity is especially high by example in hospital where the QC laboratory is close to patient injection room. The inferior lead ring is specially designed with specific openings and cell seat to install the Elysia-Raytest GABI Nova flow cell. In the inferior part of the shielding where the scintillator is located, 5 cm of leads surround the detector while in the superior part which is less critical, we have 3 cm of lead protection.



Specifications

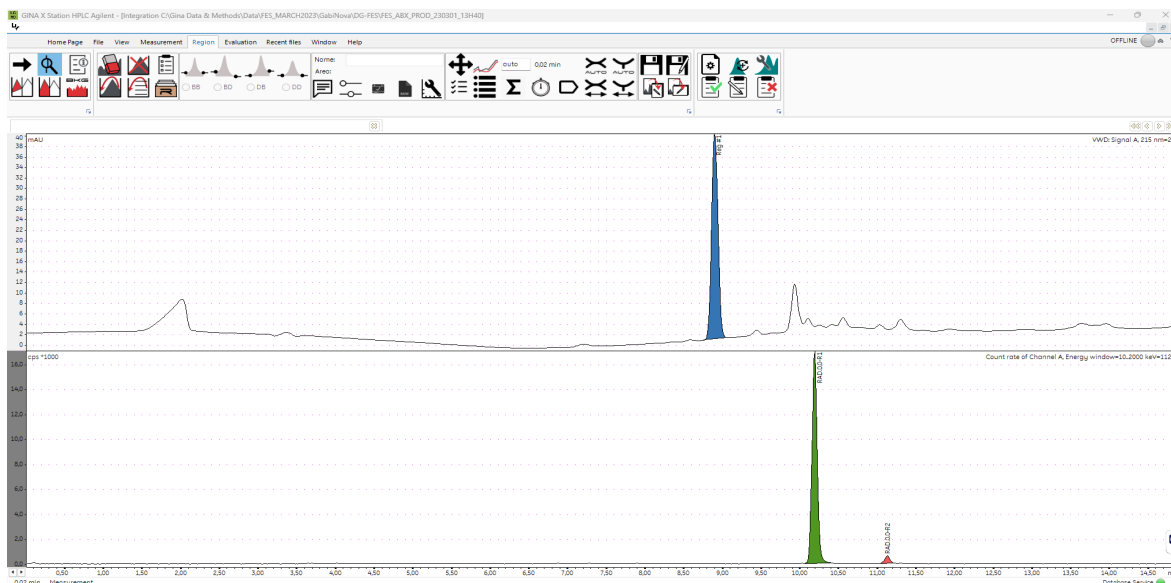
Technical

2 simultaneous counting channels

Energy range	10 – 2000 keV
Detector voltage range	500 – 1200 V (0,5V setting precision)
Count rate	0 – 2.500.000 cps
Linearity	0 – 1.000.000 cps $r^2 \geq 0.99$
Data output	USB2.0 10/100 Ethernet
	2 analog outputs (0-2.5V, resolution 20 bit) Digital I/O interface:
	3 inputs
	5 relays outputs (500mA, 200V)
Flow cells	5µl to 1500µl

Physical

Housing Version	Agilent	Shimadzu	Stand Alone
Dimension	L440 x W325 x 84 mm	L420 x W260 x 84 mm	L278 x W266 x H84 mm



Headquarters : Elysia s.a.
Rue du Sart-Tilman 375
4031 Angleur - Belgium
Tel : +32 4 243 43 50
info@elysia-raytest.com

USA office: Elysia-raytest USA inc.
4302 SW 73rd Ave
Miami, FL 33155 - USA
Tel : +1 786 230 1067
info.usa@elysia-raytest.com

Production : Elysia-raytest GmbH
Benzstraße 4
75334 Straubenhardt - Germany
Tel : +49 7082 9255 0



www.elysia-raytest.com