The GAMMAmatic I is a microprocessor controlled automatic Gamma Counting System for 480 samples. It is designed to meet the user’s requirements as well in research as in clinical applications (radioimmunoassays).

The GAMMAmatic I can easily be converted to a GAMMAmatic II in the field at a later date.

Sample changer
The sample changer consists of 40 racks, holding 12 tubes each carried to and from the counting station by two sets of endless belts. An infrared reader system identifies each rack by its own number and the tube position number within the rack. A wide variety of tubes (up to 16 mm diameter) is accepted. For the convenience of multiple users their sample batches are separated by green racks. The black rack provides automatic STOP.

Detector / Analyzer
Standard detector of the GAMMAmatic I and II is a 2" sodium iodide well type detector. For efficient counting of high energy isotopes a 3" detector with additional lead shielding is available. The GAMMAmatic I and II is equipped with a dual channel parallel analyzer. For the 7 most commonly used isotopes, there are preprogrammed energy windows. In addition the user can program one window on each counting channel by simply entering the lower and upper energy limits (in keV values).

The “IR-Commander”
Setting up of a counting program is done via the keyboard of the “IR-Commander”. Besides the counting and other parameters, the program contains the number of the first rack of a sample batch. Upon identification of this rack by the reader-system, the counting program is applied.

The IR-Commander is also used to enter external raw data of radioimmunoassays for further reduction.

RIA-software
The GAMMAmatic I provides the user with the most extensive RIA data reduction software available for microprocessors. According to the assay, the user can select between 5 different (plus two optional) fitting methods for the standard curve.

Automatic spillover correction for dual isotope measurements, a screening method for the HBsAg and parallel data reduction in two channels for dual isotope RIA’s is also available.
The GAMMAmatic II is an automatic Gamma Counting System for 480 samples with an integrated, freely programmable microcomputer.

In Gamma Counting and its data processing, the GAMMAmatic II is the optimum of what can be done today!

The Brain
The GAMMAmatic II is controlled by a microcomputer. The computer sends instructions to the counting device of the unit and receives data, that will be either stored or processed.

Data reduction can either be done by standard, factory provided programs or user defined programs (BASIC). During standby of the counting device, the computer can be used for any other laboratory data processing.

20 User Programs
Editing of a counting program is done with the microcomputer keyboard. All the necessary information is displayed on the video-screen.

Programs can be copied, deleted and protected, if necessary. By pressing the appropriate key, the user is informed at a glance about all the occupied programs, currently in use. A protected program can only be modified or deleted by entering the correct pass-word, known only by the user of this program.

Program library
The GAMMAmatic II is equipped with an extensive software package, containing all the necessary data-reduction facilities normally needed in gamma counting.

To mention a few of the programs:
- cpm’s with background subtract.
- Spillover-corrected cpm’s for dual-isotope measurements, including background subtract.
- RIA software with logit-log, linear interpolation and spline curve-fits.

A library of special application programs is under development!

Home-made programs
Attention:
If you have made a program for an interesting application, contact us. We might purchase it from you for our application program library!