



GD-6x2M Drawing

4 PI Counting 4 π Absolute Counting

Model – GD-6X2M

Features

- Accurate Measurement and Calibration of Samples and Sources
- Dual Hemispherical Chambers
- Self-absorption and Backscatter from Sample Holder Are Eliminated
- Proportional or Geiger Counting

Included

- 1 ea. 4 pi **Counting Chamber** with opening/sealing mechanism.
- 4 ea. **Sample Carrier Rings**.
- 144 sq. inches .00008" Conducting **Mylar**.
- 1 ea. **Gas Flow Meter**.
- 1 ea. 6 ft. **Gas Hose**.
- All Inter-chamber Cables and **Hoses**.
- 2 ea. 4 ft. **Shielded RG58 Signal Cable** with BNC termination.

Application

Model **GD-6X2M** 4 pi gas flow counter is a high precision dual chamber instrument for accurate measurement and calibration of radioactive sources and isotopes.

Description

The two proven **GD-6** hemispheres are accurately formed and polished and furnish long, flat Alpha and Beta plateaus.

Self-absorption and backscatter are both eliminated with the radioactive sample being measured is deposited on a thin conducting film carrier.

Operation with Geiger gas (99.05% Helium 0.95% Isobutane) provides equal pulse size for all counted radiations, but loses the ability to separate isotopes by radiation type or energy.

Operation with proportional gas (P-10 90% Argon 10% Methane) allows samples of higher counting rate.

It also allows pulse height analysis of samples since electrical pulses produced are proportional to the energy deposited in the chambers by the radiation.

In practice, the sample carrying conducting film is stretched onto a metal ring. The ring is inserted between the two hemispheres in their separated position (see drawing), after which the system is closed ("O" ring seal) and, after flushing, 4 pi counting is performed.



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