

4 PI COUNTER

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



Figure 1: GD-6X2M

DESCRIPTION: 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. The two proven **GD-6** hemispheres are accurately formed and polished and furnish long, flat alpha and beta plateaus. Since the radioactive sample being measured is deposited on a thin conducting film carrier, self-absorption and backscatter are both eliminated. 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.

INCLUDED ARE:

- 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**;
- All **Interchamber Cables** and **Hoses**;
- 2 ea. 4 ft. **Shielded RG58 Signal Cable** with BNC termination;
- 1 ea. 6 ft. **Gas Hose**.

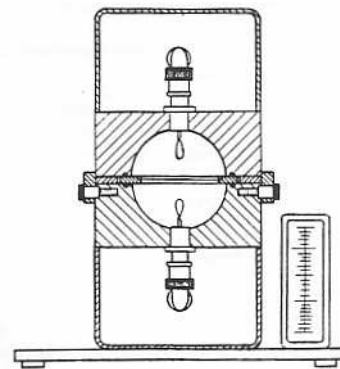


Figure 2: GD-6x2M Drawing

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