

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.

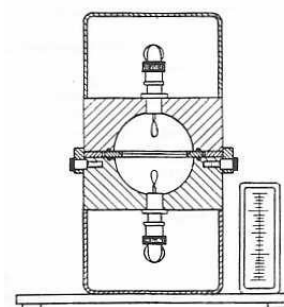
ELECTRONICS:

PRS-7-DSC

- DUAL SINGLE CHANNEL ANALYZER
- 2 INDEPENDENT DETECTOR INPUTS
- COINCIDENCE CIRCUIT SIGNALS IF BOTH DETECTORS SEE A PULSE AT THE SAME TIME
- POWER: AC & RECHARGEABLE BATTERY AND CHARGER
- THREE PRESETTABLE WINDOW POSITIONS
- SWITCH SELECTABLE; SIX DECADES
- COMPUTER INTERFACE: RS-232, **OPTIONAL**: USB
- CRYSTAL CONTROLLED
- **IP65**



GD-6X2M



GD-6X2M
INTERNAL VIEW



ELECTRONICS FOR GD-6X2M
PRS-7-DSC

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: Choice of Gas Operation:

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



TECHNICAL ASSOCIATES

7051 ETON AVENUE, CANOGA PARK, CALIFORNIA 91303

PHONE: 818-883-7043 | FAX: 818-883-6103

SALES@TECH-ASSOCIATES.COM | TECH-ASSOCIATES.COM | USNUCLEARCORP.COM



4 PI COUNTING

4 π ABSOLUTE COUNTING

Model ~ GD-6X2M

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.

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.

SPECIFICATIONS:

COUNTING SYSTEM COMPONENTS:

- 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.

ELECTRONICS:

PRS-7-DSC:

Sturdy portable instruments designed for rugged field use.

- Both integrate and ratemeter functions.
 - Dual Single channel analyzer with three presettable windows.
 - Variable high voltage 0-2000v.
 - All closures are gasket sealed to result in a splash proof instrument.
 - LCD style scaler readout.
 - **Digital Readout:** 6-digit LCD Rate, 8 digit integrate.
 - **Time Base:** Crystal controlled 1-10,000 seconds; user settable.
 - **Display Modes:** Rate, Integrate.
 - **Range:** 1uR/hr to 1000 R/hr; 0 to 30,000 Cps; 0.1 mRem/hr to 10 Rem/hr.
 - **Alarm:** 2000 Hz audio tone with audio "mute" switch
Visual: RED LIGHT, high current relay.
 - **Computer interface:** RS-232
- OPTION:** USB

WEIGHT AND DIMENSIONS: - PRS-7-DSC

- **Dimensions:** 10" L x 7" W x 7"H (25 cm L x 18 cm W x 18 cm H) Includes handle
- **Weight:** 8 lbs (4kg) including batteries.



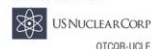
TECHNICAL ASSOCIATES

7051 ETON AVENUE, CANOGA PARK, CALIFORNIA 91303

PHONE: 818-883-7043 | FAX: 818-883-6103

SALES@TECH-ASSOCIATES.COM | TECH-ASSOCIATES.COM | USNUCLEARCORP.COM

DIVISION OF



OTCOB-UCLC