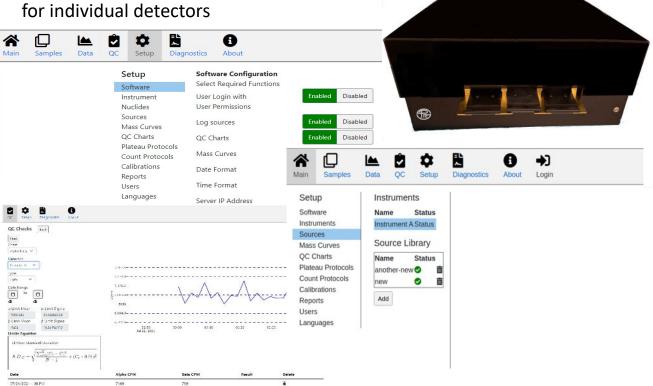
## **D6000M**



### **Overview**

The D6000M is the next dimension of manual ow background alpha/beta counting systems. It is build for radiochemistry, but can be used for both health physics and radiochemistry applications. The D6000M is built upon the proven mechanical and detector designs of the previous WPC-9604 and enhances that design with advanced electronics, electronic gas flow control and monitoring, advanced QA/QC tracking and RFID technology. Alpha/Beta Dimensions, a web based operating platform is built upon an integrated embedded computer that can be accessed via web browser from a network or a directly connected PC. The included Alpha/Beta Dimensions software allows for easy system programming, data management, and control chart maintenance. Integral system sensors track humidity, temperature, altitude, Barometric pressure, all system voltages., and gas flow and conservation controls



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# **D6000M**



### **Features**

- Dual 2.25" (5.7 cm) Gas Flow Proportional Detectors per drawer provide 6 detectors per layer with up to 4 layers per system.
- A system can be configured with 6, 12, 18 or up to 24 individual detectors in a small footprint.
- Web based interface is standard mouse/keyboard and touch Screen compatible
- Sample Carriers with RFID read/write capability contain sample, protocol/routine and analysis result data.
- Easy Window and Detector Drawer Module Replacement
- Accommodates 2" (5.1 cm) to 2.36" (6.0 cm) Planchet Diameters
- Radon Progeny Compensation for Air Filters via the Pseudo-Coincidence Method
- Cosmic Guard Detector
- Dual Anode Wire Detector Option Available
- Lockout of a Damaged Detector and Maintain Operational Status
- Independent control and gas conservation for each detector
- Digital Processing of Pulses allows for discreet channel adjustment for alpha/beta discrimination
- Virtual Oscilloscope for Signal Diagnostics and Tuning
- Environmental Status Tracking of Humidity, Barometric Pressure/Altitude, Temperature
- Digital Window and Gain Adjustment
- Low voltage UL/CE rated power supply
- Ethernet based communicationsD
- 80 μg/cm<sup>2</sup> detector window

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#### D6000M

Typical Efficiency <sup>1</sup>				
Source	Тор	1/8" Bottom	1/4" Bottom	5/16" Bottom
Pu-239	35%	31%	25%	24%
SrY-90	51%	47%	40%	39%
Tc-99	39%	33%	28%	26%

Background				
Condition	Warranted (cpm)		Typical (cpm)	
	Alpha	Beta	Alpha	Beta
With Lead & Guard	<0.1	<0.9	0.05	0.7

Instrument Options and Accessories		
Option	Order Part Number	
1/8 Inch Planchet	700-0007	
1/4 Inch Planchet	700-0008	
5/16 Inch Planchet	700-0009	
Carrier Inserts, Set of 50, 1/8 in., 1/4 in., or 5/16 in.	140-0305	
Mobile Cart	120-0011	
Standard Carrier Set (1-50 + QC + Routine)	120-0033	
Carrier Set of 50 (Any Sequence)	120-0034	
Extended Warranty	108-0001	
Service Contract	Service Contract	
Installation	Install	
Computer System	Computer	

Instrument Specifications		
Category	Specifications	
Sample Size	2 Inch Diameter (5.1 cm) up tp 6.0 cm	
Capacity	6, 12, 18, 24	
Depth	1/8, 1/4, or 5/16 Inch	
Data Export	USB Flash Drive, Ethernet Export	
Interface	Web Browser/Touch Screen	
Count Modes	Alpha Only, Beta Only, Alpha then Beta and Alpha/Beta Simultaneously	
Power	110-240 Vac, 50-60 Hz Input	
Window	Aluminized, 80 μg/cm <sup>2</sup>	
Operating Temp	Temp 10°C to 40°C (50°F to 104°F)	
CE	Certificate of Compliance Available	

Accessories Supplied		
Accessory	Quantity	
Ethernet Cable	1	
1/8" and 5/16" carrier inserts	55	
Standard Carrier Set	1	
Two Stage Regulator & Tubing/Fittings	1 (CGA-350 standard)	

Instrument Specifications		
Dimension/Item	Size	
Height*	Capacity Dependent	
Width	32 Inches ( 81 cm)	
Depth	25 Inches (64 cm)	
Installed Weight*	430 lbs ((195 kg)	
Shipping Weight	635 lbs (288 kg)	
Shipping Crate Dimensions	48x40x47" (122x102x119 cm)	

- (1) Efficiency determined using 2 inch NIST traceable distributed source.
- Environmental background during measurements: 8 µR/hr.
- Provided carrier insert size can be altered at time of order.
- All specifications are subject to change without notice.

**Protean Instrument**