# ASC-950-DP-G With Guard Option

### **Overview**

The ASC-950-DP-G is a high-speed counter equipped with a dual phosphor scintillator type detector that supports gasless operation and easy portability. Cosmic background radiation reduction is possible with the optional Anti-Coincidence Guard Detector. DUO Express software allows for easy system programming, data management, and control chart maintenance. Multiple instruments can be connected for user convenience. This sample counter is ideal for standard Health Physics applications such as smears and air filters.

## **Features**

- $\Rightarrow$  Automatic Sample Changer
- $\Rightarrow$  Dual Phosphor Scintillator Detector
- $\Rightarrow$  Touch Screen Interface
- $\Rightarrow$  Lightweight Portability
- $\Rightarrow$  2 in. (5.1 cm) Standard Planchet Diameter
- $\Rightarrow$  Radon Compensation for Air Filters
- $\Rightarrow$  Optional Guard Detector
- $\Rightarrow$  Optional Lead Shielding
- $\Rightarrow$  50 Sample Capacity (100 Optional)
- $\Rightarrow$  Gross Alpha/Beta Counter

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### ASC-950-DP-G

Optimized for Lower Energy Betas									
	Typical Efficiency								
			1/8"		1/4"		5/1	6"	
	Source	Тор	Bottom	۱	Bottor	n	Bott	om	
	Pu-239	35%	30%		24%		229	%	
	SrY-90	47%	41%		36%		359	%	
	Tc-99	26%	24%		20%		199	%	
	Background								
	Condition		Warrant	ed	(cpm)	Т	ypical	(cpm	1)
			Alpha		Beta	A	lpha	Bet	a
W	With Lead & Guard		<0.2		<25	(	0.05	13	}
w	With Guard No Lead		<0.2		<30	(	0.05	23	
W	With Lead No Guard		<0.2		<55	(	0.05	41	-
No	No Guard No Lead		<0.2		<65	(	0.06	55	5

Instrument Specifications				
Category	Specifications			
Sample Size	2 Inch Diameter (5.1 cm)			
Capacity	50 (100 optional)			
Depth	1/8, 1/4, or 5/16 Inch			
Data Export	USB Flash Drive, USB PIC Link			
Interface	Touch Screen			
Count Modes	Alpha Only, Alpha/Beta Simultaneously			
Power	110-240 Vac, 50-60 Hz Input			
Window Aluminized, 80 μg/cm <sup>2</sup>				
Operating Temp	10°C to 40°C (50°F to 104°F)			

Instrument Specifications				
Dimension	Size			
Height*	36 Inches			
Width	23.5 Inches			
Depth	23.5 Inches			
Weight*	110 lb			
Guard Weight	5 lb			
Shield Weight	50 lb			

Optimized for Higher Energy Betas	ļ
Typical Efficiency	

Source	Тор	1/8" Bottom	1/4" Bottom	5/16" Bottom
Pu-239	34%	30%	24%	21%
SrY-90	45%	40%	35%	34%
Tc-99	24%	21%	19%	18%

Condition	Warranted (cpm)		Typical (cpm)	
Condition	Alpha	Beta	Alpha	Beta
With Lead & Guard	<0.2	<25	0.05	12
With Guard No Lead	<0.2	<30	0.03	15
With Lead No Guard	<0.2	<55	0.08	35
No Guard No Lead	<0.2	<65	0.06	40

Instrument Options				
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			
Lead Ring	120-0010-ASC			
Cosmic Guard Detector	110-1073			
Mobile Cart	120-0011			
Standard Carrier Set (1-50 + QC + Routine)	120-0033-ASC			
Carrier Set of 50 (Any Sequence)	120-0034-ASC			
100 Sample Option	120-0036-ASC			
50 Sample Stack, Stand, and Carrier Set	120-0075-ASC-50			
100 Sample Stack, Stand, and Carrier Set	120-0075-ASC-100			
Extended Warranty	108-0001			
Service Contract	Service Contract			
Installation	Install			
Computer System	Computer			
Simplicity Software Package	Simplicity			

• Efficiency determined using 2 inch NIST traceable distributed source.

- Environmental background reads 8 µR/hr.
- Provided insert size can be altered at time of order.
- All specifications are subject to change without notice.
- ROHS compliant (lead by exemption)
- Alpha then Beta count mode available with Simplicity software.
- Optimization performed by adjusting instrument voltage.

Accessories Supplied			
Accessory	Quantity		
PIC Link Cable	1		
1/8 Inch Inserts	55		
Standard Carrier Set	1		

\*100 Sample option adds approx. 18 inches in height and 10 pounds in weight.

### **Protean Instrument**