

# IPC - 650

## Alpha/Beta Counting Instrument



The IPC-650 ultra-low background windowless automatic is a newly redesigned instrument based upon the IPC-650, which was the foundation product of Protean. The IPC-650 is intended to address only the radiochemistry market and does not have a built-in interface, thus is only operated from a PC running the Vista 2000 radiochemistry software. This hemispherical windowless gas-flow proportional counter design offers the best efficiencies available for low-energy beta and alpha particles.

### FEATURES:

- Automatic Sample Changer
- 5.1 cm (2 in.) Standard Planchet Diameter
- Standard 50 Sample Capacity
- Ultra-Low Background Counter
- Windowless Gas Flow Detector
- Remote PC Interface

### SPECIFICATIONS:

#### TYPE

Sample Changer - Automatic  
Number of Detectors - 1  
Counter - Low background  
Sample Size - 05.1 cm (2 in.)  
Interface - Remote PC

#### DETECTOR

Size - 5.7 cm (2.25 in.)  
Type - Hemispherical style gas flow proportional  
Window - Windowless  
Guard Detector  
Counting Gas - P-10, 150 cc/min @ 10 psi  
Gas-Pro Protection - Yes  
Shielding - 10.2 cm (4 in.) thick

#### SAMPLE

Size - 5.1 cm (2 in.) diameter Planchets  
Capacity - 50  
Reader - Bar Code  
Range - 1-999  
Data Export - Serial RS-232

#### INTERFACE

Type - Remote PC  
Compatible Software - Vista 2000

#### PERFORMANCE

Alpha Background - 0.05 cpm  
Beta Background - 0.7 cpm  
Po<sub>210</sub> Efficiency - 45%  
Am<sub>241</sub> Efficiency - 45%  
Th<sub>230</sub> Efficiency - 45%  
Sr<sub>90</sub>/Y<sub>90</sub> Efficiency - 55%  
Tc<sub>99</sub> Efficiency - 45%  
Cs<sub>137</sub> Efficiency - 45%  
Alpha-Beta Crosstalk - < 0.1%  
Beta-Alpha Crosstalk - < 0.1%  
Count Modes - Alpha only, Alpha/Beta simultaneously

#### PHYSICAL

Size - 68.6 x 55.9 x 86.4 cm (27 x 22 x 34 in) (H x W x D)  
Weight - 194 kg (427 lb)