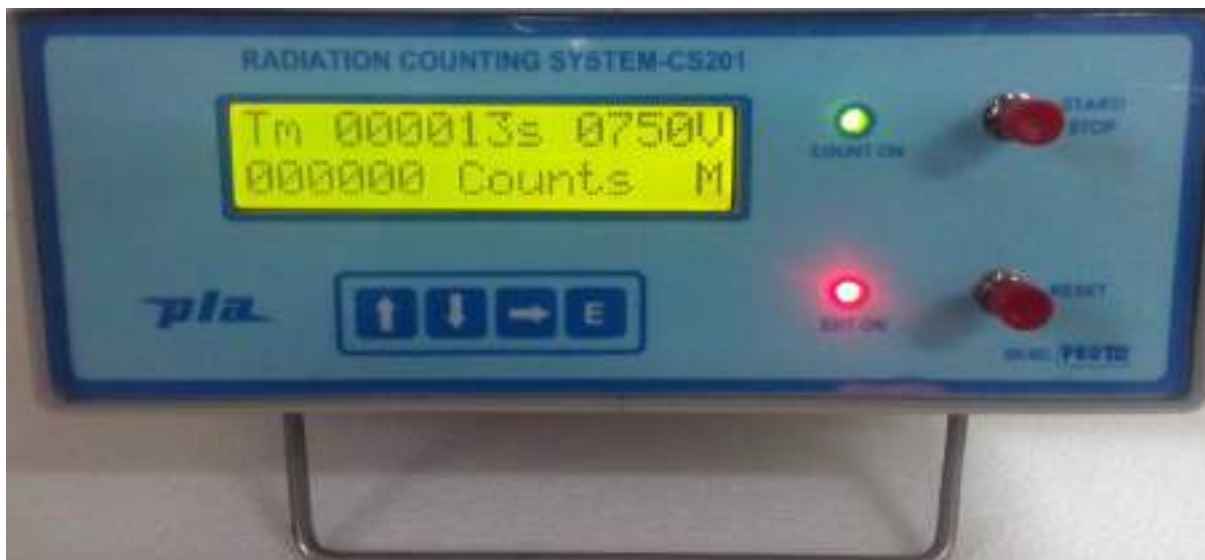


SALIENT FEATURES

- **LARGE LCD DISPLAY ($\approx 10\text{mm}$ character height)**
- **DESIGNED FOR GROSS COUNTING OF BETA/GAMMA OR ALPHA**
- **MICROCONTROLLER BASED**
- **DATA STORAGE & RECALL OF 1000 READINGS**
- **PRESET TIME, PRESET COUNT, CPS, CPM**
- **CYCLIC MODE**
- **PLATEAU MEASUREMENT**
- **SERIAL PORT**
- **BACK-LIT LCD (16 X 2)**
- **LABEL ASSIGNMENT**
- **MENU DRIVEN**
- **RANGE : 999999 COUNTS & 999999 SECONDS**
- **PC SIMULATION**



INTRODUCTION

Micro Controller based counting system type CS201 is designed to measure gross counting of contamination collected on filter paper.

Beta/Gamma GM Probe GP30/GP40, with GM Tube can be used with this for measuring beta/gamma activity on sample paper.

ZnS scintillation probe type PSP647D1 can be used with this for measuring alpha activity on sample paper.

Data can be stored & transferred to PC. Also, start/stop commands can be given from the PC.

Radiation Measured depend on the probe selected whether Alpha or Beta/ Gamma.

Unique large character LCD ($\approx 10\text{mm}$ character height) offers clear & convenient readability as compared to other makes having less than 5mm character height.

TECHNICAL SPECIFICATIONS

Input	: Two UHF connectors: (a) For Alpha Probe (b) For GM Tube Note: Only one to be used at a time One BNC for signal input
Input Sensitivity	: -50mV
Built-in Load Resistor	: (a) $390\text{K}\Omega$ for α probe & (b) $3.3\text{M}\Omega$ for GM Probe
Paralysis Time Selection	: $250\mu\text{sec}$ or $350\mu\text{sec}$ or $550\mu\text{sec}$ & OFF position $<6\mu\text{sec}$ (useful for GM Counting)
Pulse Height Discriminator	: Selectable by internal preset 200mV to 2.5V

EHT VOLTAGE

Range	: 20V to 1250V , settable	Maximum Load Current	: $200\mu\text{A}$
Load Regulation	: 0.5% of set voltage		

Display	: 16 x 2 Dot matrix LCD with approx. 10mm character height
Count ON Indication	: 3mm green LED
User Interface	: Menu driven: START/STOP, RESET, UP, RIGHT, ENTER buttons
Preset Time Mode	: 6 Digit Counter: 999999 counts 6 Digit Timer: 1 to 999999 seconds Label Assignment: BG, SA or ST No. of Cycles: 1 to 99 Cycle Serial Number for Storage: 0 to 999
Preset Count Mode	: 4 Digit Counter: 9999 counts Serial Number for Storage: 0 to 999 Label Assignment: BG, SA or ST No. of Cycles: 1 to 99 Cycles
CPM Mode	: 6 Digit Counter: 999999 CPM Label Assignment: BG, SA or ST Time Constant: 60 Sec, display refresh every sec(avg. of last 1min)
CPS Mode	: 6 Digit Counter: 999999 CPS Label Assignment: BG, SA or ST Time Constant: 1 Sec
Recall Menu	: Recalls the Data saved of counts along with time & Serial Number
Block Menu	: Readings of counts along with time & serial number can be printed, dumped (on PC via serial port) or deleted with FROM & TO range
Data Storage	: Stores the last 1000 readings: Counts, Time & Serial number
Plateau Measurement	: Facility to measure plateau of the detector automatically Settable Parameters: Start voltage, End voltage, time interval, step size Result: Displayed in terms of plateau slope operation voltage, start and end Points of plateau
Serial Port	: USB port for data dumping to PC from block menu & PC can give start/stop command in 'preset time' mode
Power Supply	: 230V AC, $\pm 10\%$, 50Hz
Dimensions	: 300mm x 230mm x 115mm approx.

ESSENTIAL ACCESSORIES (AT EXTRA COST)

DETECTOR: PSP647D1	: As per Cat.No.PSP-647D1/0805 An alpha probe having drawer type arrangement for 1" ϕ or 2" ϕ sample filter paper measurement Mylar Mounting: On S.S. frame for easy replacement 2" dia PM tube (10 dynodes, Gain: 0.6x10 ⁶ , Dark Curr:0.3nA typical) (Shock: 30g/11ms/3 shocks per axis, Sinusoidal Vibration: 10-32Hz: 10mm, 32-2000Hz:20g, 2 octaves/min)
GP40	: GM probe GP40 having end-window GM tube (areal density : 1.5-2.0mg/cm ² , eff. dia. \approx 1.15, eff. length \approx 1.45") or equivalent with bakelite stand & UHF connector
P1705	: Lead Castle P1705 for GP30/GP40 GM probe

NOTE: All optional at an extra cost.

CAT. No. CS201/0216

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