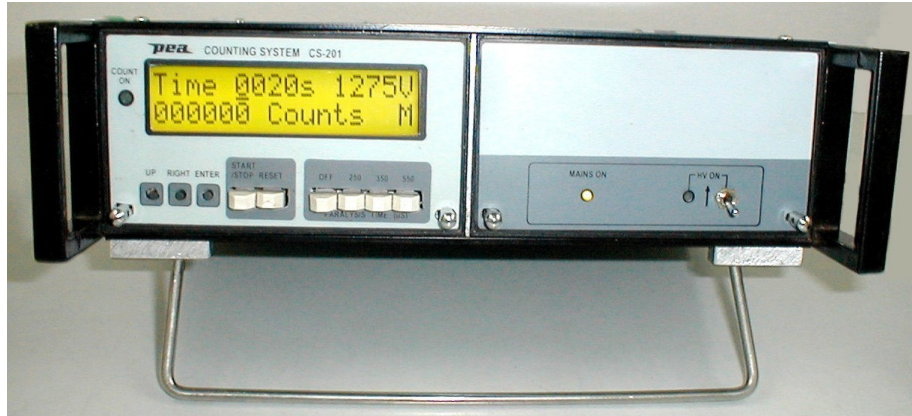


SALIENT FEATURES

- **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 & 9999 SECONDS**
- **PC SIMULATION**
- **OPTIONS: PRINTER PORT, RTC**



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.

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) 390K Ω for α probe & (b) 3.3M Ω for GM Probe
- Paralysis Time Selection** : 250 μsec or 350 μsec or 550 μsec & OFF position <6 μsec
(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 μA
- 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 4 Digit Timer: 1 to 9999 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
Serial Port	: RS232 (RS485 optional) for data dumping to PC from block menu & PC can give start/stop command in 'preset time' mode
RTC (optional)	: To store data with real time & date stamping
Printer Port (optional)	: For printing on Centronics (SPP) compatible printers
Power Supply	: 230V AC, $\pm 10\%$, 50Hz
Dimensions	: 80mm x 300mm x 310mm approx.

ALSO AVAILABLE (at an extra cost)

Counting system with embedded software for efficiency, Bq calculations & background subtraction.

ESSENTIAL ACCESSORIES (at an extra cost)

DETECTOR: PSP647D	: 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 (PM Tube Specs: Shock: 30g, 11ms, 3 shocks/axis Vibration: 10 - 32Hz/10mm, 32 - 2000Hz/20g Dark current: 1.5nA at nominal sensitivity)
GP30	: GM probe GP30 having end-window GM tube (areal density : 1.5-2.0mg/cm ² , eff. dia. \approx 0.781, eff. length \approx 1.46") or equivalent with bakelite stand & UHF connector
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 optionals at an extra cost.

CAT. No. CS201/0906

PLA ELECTRO APPLIANCES PVT. LTD.

THAKOR INDUSTRIAL ESTATE, KURLA - KIROL ROAD, VIDYAVIHAR (WEST), MUMBAI - 400 086
TEL : 2511 6864 / 6865 FAX : 91-22 - 2516 8948 WEB : www.plaelectro.com E-Mail : pla@bom3.vsnl.net.in