

INDIAN INSTITUTE OF TECHNOLOGY KANPUR Department of Chemical Engineering

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Enquiry No.: IITK/CHE/R. Pala/2015-16/02

Enquiry Date: July 02, 2015 Closing Date: July 08, 2015

Sealed quotation(s) in Indian Rupees or USD with all technical details so as to reach latest by 3:00 PM on July 08, 2015 are invited for the supply of following items.

Note: Please provide Price Bid and Technical bid combined in single quotation and also mention the enquiry number and instrument name on the sealed envelope carrying the quotation.

8 Channel Battery Testing Machine 5V 10mA

General Specifications

AC Input: AC 220V±10%, 50Hz
Power: 500 mW
Resolution: AD: 16bit; DA: 12bit
Input Impedance ≥ 1MΩ

Voltage Measuring Range:

Charge: 10mV~5V
Discharge: 10mV~5V
Discharge Min Voltage: 10 mV
Accuracy: ± 0.1% of FS
Stability: ± 0.1% of FS

Current Range:

Charge: $0.02\text{mA}^{-}10\text{mA}$ Discharge: $0.02\text{mA}^{-}10\text{mA}$ Accuracy: $\pm 0.1\%$ of FS Stability: $\pm 0.1\%$ of FS

<u>Power</u>

Output Power Per Channel : 50 mW Stability : ± 0.2% of FS

Time:

Rise Time : 20 ms (0~Full Range) Step Time : ≤ (365*24) hour/step Time Format : 00 : 00 : 00 (h:min:s)

Data Acquisition:

Time interval Δt : 1s ~ 60000s Voltage interval ΔU : 10mV ~ 5V Current interval ΔI : 0.02mA ~ 10mA

Frequency: 1Hz

Charge:

Mode of Operation : CCC, CVC, CC & CVC
End Conditions : Voltage, Current, Test Time, Capacity

Discharge:

Mode of Operation: CCD, CPD

End Conditions: Voltage, Current, Test Time, Capacity

Cycle:

Cycles: 65535 Steps: 254

Nested Function : Max three levels of loops

Protective Function Software:

- Power-off data protection
 - Off-line Operating
- User-defined safety (upper and lower) tolerance of current, voltage and delay time

Channel Features: Independent pairs of closed loop for constant current source and constant voltage source

Channels: Independent control
Number of Channels Per Cabinet: 8
Detection and Sampling: 4-wire Connecting

Noise Density: < 85 dB

Data Management : MYSQL Database Communication Means : TCP/IP Protocol Export Formats : EXCEL, TXT, Graph Communication Interface : Ethernet Port Operating Temperature : 0°C ~ 40°C

Storage Temperature : -10°C ~ 50°C Operating Humidity : ≤70% RH Storage Humidity : ≤80% RH

Standard package includes:

1. Main machine (Qty.: 1 no.)

2. RS 232 cable (Qty.: 1 no.)

3. Software (Qty.: 1 no.)

4. Alligator clip (Qty.: 8 no.)

5. Power cord (Qty.: 1 no.)

The machine should be duly certified / authorized and the vendor should produce the certificate for the same.

Terms & Conditions:

- I. Price Bid and Technical bid should be combined.
- II. Prices (FOB/ High Sea Sales) should include delivery up to nearest airport.
- III. Clearly state the CIF charges to IIT Kanpur and other taxes as applicable.

- IV. Warranty should at least be for 1-3 years after installation.
- V. Validity of quotation should be at least for 90 days.
- VI. The delivery time should be clearly mentioned. Shorter delivery time may be given a preference.
- VII. The delivery period should be specifically stated.

Kindly mention the enquiry number on the sealed envelope carrying the quotation.

The quotation/s may be submitted as per the attached format. Kindly send the sealed quotation(s) to the following address:

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