

## 2kW Programmable DC Power Supply

Indent No. & Date: - MMK/CNS/18-19/08, Dt: 25.05.18

### Technical Specification:-

Sr. No.	Parameter	Description
1.	Input Voltage	240 Vac, Single Phase (Operating range 216-264 Vac)
2.	Output voltage	0-2000 VDC
3.	Output current	0-1 ADC
4.	Power Factor (100% load)	> 0.70
5.	Efficiency	88% at full load
6.	Load Regulation (0 - 100%)	Voltage Mode: $\pm 0.01\%$ of full scale Current Mode: $\pm 0.04\%$ of full scale
7.	Line Regulation (90 - 265 VAC)	Voltage Mode: $\pm 0.004\%$ of full scale Current Mode: $\pm 0.02\%$ of full scale
8.	Ripple + noise	5500m Vrms (with high slew rate option)
9.	Temperature Coefficient per Deg. Cent.	0.04 % / °C of maximum output voltage 0.06 % / °C of maximum output current
10.	Load Transient Response	2ms to recover within $\pm 1\%$ of full scale output, with a 50% to 100% or 100% to 50% step load change
11.	Slew rate	4 ms for output voltage change from 0 to 63% 8 ms for output current change from 0 to 63%
12.	Programming accuracy	Voltage: 0.075% of full scale voltage Current: 0.075% of full rated current
13.	Rack size	19", 2U
14.	Interface	RS232 serial interface, 37-pin isolated analog/ digital I/O
15.	Front Panel	<b>LED display:</b> Output voltage, output current, voltage and current set point, Over voltage trip and over current trip <b>Indicators:</b> Interlock, External input voltage beyond limits, under voltage AC input, over temperature condition <b>Controls:</b> Front panel control, External voltage/current control, Computer control
16.	Safety standard	EN61010-1:2001-02
17.	EMI EMC standard	EMC standard: 2004/108/EC Generic Emission standard : EN61000-6-3:2001 EN61000-6-3:2001 Generic Immunity standard: EN61000-6-1:2001
18.	Operating temperature	0 to 50°C
19.	Protection	Over voltage, Over current, Over temperature, Short circuit

## **Terms & Conditions:**

### **Your quote should mention/include the following:**

- Kindly send technical and financial bid separately in sealed envelopes.
- Maximum discount if any should be offered and mentioned.
- Quoted price should include the cost for installation, Three Year warranty, AMC and required accessories
- Validity of the quote at least for 90 days.
- FOB/FCA (indicating port of shipment) values should be quoted separately if import is required. For quotes in INR, the price quote should be for delivery at Kanpur.
- The quote should cover insurance for transport up to Kanpur.
- Indian agency commission if applicable (should be certified by the principal if no agency commission is applicable) in case of import.
- Authorization certificate from the principal if you are a local agent.
- Terms and conditions for the payment, including the banker's name of the principal and the account number, if any, for electronic transfer.
- Payments terms: 100% after successful installation and commissioning for Indian manufacturer.
- Mere compliance is not sufficient; the technical details must be supported by detailed technical datasheets of the offered product(s) (in technical bid).
- Users' list with contact address in technical bid.
- Concessional rate of GST (@5%) will be applicable with reference to Notification No. 45/2017- Central Tax (Rate) dated 14/11/2017 for Indian manufactures. We will provide relevant certificate for this purpose. On import items for research purpose presently the GST applicable is 0% (zero).
- In case of import items, authorized service provider within India must be available & all service requests must be attended within 48 hours of request.
- The Institute reserves the right of accepting and rejecting any quotations without assigning any reason.

**Note: Only principal manufacturers or authorized representatives are requested to send the quote along with proper certificates. The envelope should be marked as "Quote for 2kW Programmable DC Power Supply".**

**Quotation must reach to the following address before 5 PM on June 18, 2018:**

**Dr Manish Madhukar Kulkarni**

Centre for Nanosciences

Indian Institute of Technology Kanpur,

Kanpur 208016 (UP), INDIA