Indian Institute of Technology Delhi

19th January, 2012.

Sealed quotations are invited (**in two bids: technical, commercial sealed separately**) for supply of Compact rack mountable dc power supply having the following specifications/ features:

General Specifications for Compact Rack Mountable DC System Power Supply

- 1. The Power Supply should be programmable through LAN/USB/GPIB as well as settable from front panel, Single Output, and housed in a compact, rack-mountable unit of 2U size (rack height is 88.9 mm).
- 2. It should provide a stable output power of up to 5000 Watts (With voltage range: 0-300V).
- 3. It should have built-in Voltage and Current measurement with front panel display.
- **4.** It should have front panel controls to easily adjust output Voltage and Current, both displayed simultaneously and suitable indicators showing the power supply status & operating modes.
- **5.** There should be extensive protection mechanism for over temperature, over current and over voltage conditions which will shut down the power supply output for any such fault condition.
- 6. There should also be under voltage limit so that output voltage below a certain limit cannot be set and the combination of over-voltage and under-voltage limits allow defining a protection window for sensitive load circuitry.
- 7. There should be facility for remote access and control of the power supply unit via standard web browser like MS Internet etc.
- **8.** It should be possible to connect two or more units in parallel or series for higher current or voltage outputs respectively.

Performance Specifications for DC System Power Supply

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a. Output Ratings :	b. Load & Line Regulations:
i. Voltage : 0 ~ 300 Volts	i. Constant Voltage Load Regulation : 50 mV
ii. Current: $0 \sim 17$ A	ii. Constant Current Load Regulation : 20 mA
iii. Power : 5000 Watts	iii.Constant Voltage Line Regulation : 30 mV
	iv. Constant Current Line Regulation : 10 mA
c. Output Ripple and Noise: In constant voltage mode:	d. Programming Accuracy : Voltage : 250 mV;
300 mV(peak to-peak), 70 mV (rms)	Current : 55 mA
e. Measurement Accuracy : Voltage : 375 mV, Current	f. Load Transient Recovery Time should be less
: 60 mA	than 2 msec
g. Output Response Time (10% to 90% or 90% to 10%	h. Over Voltage Protection : 5 – 330V
of rated o/p voltage with rated o/p resistive load) :	i. Option to saving settings : Power supply
Up Program response time (from 10% to 90% rated	should have a feature to save 15 settings (at
output voltage): 50 msec, Down Program response	least)
time with Full-Load : 100 msec, Down Program	j. Power supply should compatible to interface
response time with No-Load : 2500 msec	with 10/100 LAN, USB, GPIB, LXI (Class-C)
k. AC Power input : Nominal input Three-phase 190	m. Environmental conditions: Environment Indoor
- 240 VAC, 50 Hz	use, installation category II (AC input),
1. Weight: Less than 17 kg	pollution degree 2, Operating temperature at
	full-load: 0°C to 40°C, Storage temperature
	range: -20°C to 70°C, Operating humidity:
	30% to 90% relative humidity (no
	condensation), Storage humidity: 10% to 95%
	relative humidity (no condensation)

Terms & Conditions: (i) Vendors need to quote the price of equipment on FOB basis, (ii) applicable taxes, (iii) Vendors have to supply the agency certificate and other essential documents, (iv) Warranty period, (v) quote delivery period, (vi) validity of quotation must be three months, (vii) LC terms must be specified clearly, (viii) compliance sheet and checklist of technical specifications must be supplied along with the quotation.

Complete technical information of the equipment should be supplied along with the quotation/ tender documents. Quotations with in-sufficient details of specifications, terms and conditions will not be considered. IIT Delhi reserves the right to reject any quotation or all without assigning any reason. Quotations (Technical and financial bids must be sealed in separate covers) in sealed cover should reach the undersign on or before **5.00 P.M of 03rd February, 2012**.

Terms & Conditions:

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as "Technical Bid" and "Financial Bid". Both the sealed envelopes should be sent in a single sealed envelope, with clearly marked as "Compact Rack Mountable DC Power Supply". The quote should reach the following address on or before **03/02/2012 up to 5.00 P.M.**

Name: Dr. M. Veerachary,

Dept. of Electrical Engineering, Indian Institute of Technology Delhi, Hauz Khas, NEW DELHI – 110 016

- 2. Please quote prices at FOB New Delhi, inclusive of installation charges.
- 3. Quote should be in Indian Rupees as well as US Dollars and to be valid for at least three months.
- 4. Attach all the technical literature of the above item.
- 5. A minimum of three years comprehensive onsite warranty, also exclude warranty for three years.
- 6. Mention if you can provide any technical support like training of IIT Delhi personnel at IIT Delhi or in your factory and providing a technical person for operation of the machine for the initial period of 2 years. Kindly mention about this in the technical bid.
- 7. If the quote is being submitted by the representative of the Principals/manufactures themselves, a valid Agency ship/Dealership Certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
- 8. The Institute reserves the rights to accept/reject any/all quotations without assigning any reasons thereof.
- 9. Complete set of manuals for the operation and servicing of equipment should be given. All circuit diagrams, other mechanical and electrical schematics must be provided to Main unit, sub systems and accessories.
- 10. Spare set- A complete set of spares and consumables should be supplied for three years of trouble free operation.
- 11. Delivery period 4-6 weeks on receipt of PO.
- 12. Clearly specify the installation requirements such as space, power, frequency, environment (Temperature and humidity) etc.
- 13. If the items quoted are proprietary in nature, please enclose proprietary certificate from the principals stating "certified that ------ is a proprietary item of M/s. -- _____ and no other manufacture make these items".
- 14. If the bidder is Indian agent, the agency certificate should be enclosed.
- 15. Please produce compliance certificate for the specification.
- 16. Please ensure that the Indian agent has been enlisted with the Department of Expenditure, evidence may please be attached.