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INDIAN INSTITUTE OF TECHNOLOGY MADRAS

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CHENNAI 600 036

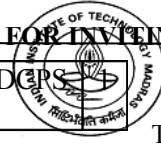
Ref. No.

FORM FOR INVITING QUOTATIONS

IzksQ; oh, txnh'k dqekj

Date: 14.8.2012

CEC	12-13	00	BEEEX	HODX	DGS&D
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DUE DATE: 14.9.2012

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bZ&esy : [vjk@iitm.ac.in](mailto:vjk@iitm.ac.in)

To

nwjHkk" k % ¼044½ 2257 4946@4947@4948@4406 : QSD1 % ¼044½ 257 4986

**ADDRESS LIST ENCLOSED**

Dear Sirs,

1. Quotations are invited in duplicate for the various items shown below / overleaf / Enclosed list.
2. The Quotations are to be in two bid system as : Technical bid and Commercial bid. Two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in a separate envelop must enclosed in the one bigger envelop duly sealed and superscribed with reference number and due date and, should be addressed to the undersigned so as to reach him on or before the due date stipulated above. A blank price quote (identical to the Commercial bid with numbers removed) should be enclosed with the Technical Part.
3. The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.
6. Local Firms : Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
7. Firms Outside Madras : Quotations should be for CIF/F.O.R. Madras. If CIF/F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
8. The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificate will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

Yours faithfully,

Head of the Dept/Centre



**CENTRAL ELECTRONICS CENTRE  
INDIAN INSTITUTE OF TECHNOLOGY MADRAS  
CHENNAI 600 036**

Ref. No.

Date:14.8.2012

DUE DATE: 14.9.2012

CEC	12-13	00 5	BEEEX	HODX	DCPS	1
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**Specifications for Programmable DC Power supply**

S.No	Description	Specification
<b>Output rating</b>		
1	Output Voltage Output Current Output Power	0 V to 40 V 0 A to 250 A 10 kW
<b>Line Regulation</b>		
2	Voltage Current	$\pm 0.01\%F.S$ $\pm 0.05\%F.S$
<b>Load Regulation</b>		
3	Voltage Current	$\pm 0.02\%F.S$ $\pm 0.1\%F.S$
<b>Voltage Measurement</b>		
4	Range Accuracy	8 V/40 V $0.05\%+0.05\%F.S$
<b>Current Measurement</b>		
5	Range Accuracy	50 A/250 A $0.1\%+0.1\%F.S$
<b>Output Noise &amp; Ripple</b>		
6	Voltage noise (p-p) Voltage ripple (rms) Current ripple (rms)	60 mV 15 mV 100 mA
<b>OVP Adjustment Range</b>		
7	Range Accuracy	0 to 110% $\pm 0.1\% F.S$
<b>Programming Response Time</b>		
8	Rise Time Full load Rise Time No load Fall Time Full load Fall Time 10% load	< 8ms < 8ms < 8ms < 100ms
<b>Slew Rate Control</b>		
9	Voltage slew rate range Current slew rate range Minimum transition time	0.001 V/ms – 5 V/ms 0.001 A/ms – 1 A/ms 0.5 ms

<b>Transient response time</b>		
10	Recovery time for $\pm 0.75\%$ of steady state output for 50% to 100% or 100% to 50% load (1 A/ $\mu$ s)	1 ms
11	<b>Efficiency</b>	> 0.85
12	<b>Drift (30 minutes)</b>	0.04 % of Vmax 0.06 % of Imax
13	<b>Interface</b>	USB
14	<b>Protection</b>	OVP, Current limit, Thermal protection
15	<b>Should have following facilities</b> <ul style="list-style-type: none"> <li>• Easy master slave parallel and series operation</li> <li>• Current sharing operation</li> <li>• Voltage ramp function (10ms to 99 hours)</li> <li>• Auto sequencing programming</li> <li>• Remote output ON / OFF</li> <li>• Ability to create complex DC transient waveform</li> </ul>	