

Indian Institute of Technology, Kanpur

Department of Mechanical Engineering

Tender Document

Sub: ENQUIRY LETTER for 150V-22A DC Power Supply

Tender Enquiry Number: IITK/ME/KMD/2022-23/04

Enquiry Date: 23.12.2022

Closing Date: 02.01.2023

Opening Date: 03.01.2023

Quotations are invited for "150V-22A DC Power Supply". The detailed specifications of the same are described below.

Technical Specification: Please mention the exact details about the proposed product in bid parameters. **Do not just write Yes, complied or do not make verbatim copy of the asked specification. It may lead to rejection of the bid.** Attach product data sheet for each of the parameters (preferably highlighted)).

SPECIFICATIONS FOR 150V-22A DC Power Supply

S. No.	Parameter	Specification
1	DC output ratings Voltage Current Power	0 to 150V 0 to 22A 3300W
2	Output ripple and noise CVp-p CVrms	100mV 25mV
3	Load effect CV load regulation CC load regulation	27.5 mV 9.4 mA
4	Source effect CV line regulation CC line regulation	17 mV 4.2 mA
5	Programming accuracy Voltage 0.05% + Current 0.1% +	75 mV 44 mA
6	Measurement accuracy Voltage 0.1% + Current 0.1% +	150 mV 66 mA
7	Load transient recovery time	< 2 ms
8	Output response time Up-prog response time Down-prog response time Full-load Down-prog response time No-load	150ms 300ms 2000 ms
9	Command response time (add this to the output response time to obtain the total programming time)	100 ms (typical)
10	Remote sense compensation	5V
11	Over-voltage protection Range	5 - 165 V
12	Output ripple and noise CC rms	60 mA
13	Programming resolution/measurement resolution Voltage Current	18 mV 2.6 mA
14	Inrush current 230 VAC single-phase	< 50 A

15	Series and parallel capability	Parallel operation-: Up to 4 identical units can be connected in primary/secondary mode with single-wire current balancing Series operation-: Up to 2 identical units can be connected using external protection diodes (see Output Terminal Isolation)
16	Analog Programming and Monitoring	
	CV/CC signal 3.3kW	CV = TTL high (4-5V) source current 10 mA; CC = TTL low (0-0.6V) sink current 10 mA
	Vout voltage	0 - 100%, 0-5V or 0-10V, user selectable, Accuracy & linearity = $\pm 0.5\%$ of rated Vout
	Iout voltage	0 - 100%, 0-5V or 0-10V, user selectable, Accuracy & linearity = $\pm 1\%$ of rated Iout
	Iout monitor	0-5V or 0-10V, user selectable, Accuracy = $\pm 1\%$
	Vout monitor	0-5V or 0-10V, user selectable, Accuracy = $\pm 1\%$
	On/Off control	Electrical voltage; 0-0.6V or 2-15V or dry contact, user selectable logic
	Enable/Disable	Dry contact. Open=Off, Short=On. Maximum voltage at terminal = 6V
17	Computer Interface	LAN, USB, and GPIB interfaces standard
18	Regulatory and Safety Compliance	EMC and IEC Standard, ● CISPR 11, Group 1, class A
19	Operating temp	0 °C to 40 °C @ 100% load
20	Operating humidity	30% to 90% relative humidity (no condensation)
21	Dimensions& Weight	Height: 88 mm (3.46 in); Width: 423 mm (16.65 in); Depth: 442.5 mm (17.42 in)& 13 kg (28.6 lbs.)
22	Input AC	190 - 240 VAC; 50/60 Hz
23	Warranty	3 Years
24	Manufacturer must have service center& NABL accredited lab in India for easy service & support	Required

Terms and Conditions:

1. Warranty & Support: Three years comprehensive on-site.
2. Quotations must be valid for 90 days.
3. Delivery period will be 6-8 weeks.
4. The Institute reserves the right to accept, including minor relaxation in technical criteria, or reject any or all of the offers in full/part without assigning any reason whatsoever.
5. All prices should be in INR and the delivery to be made at IIT Kanpur.
6. Proper authorization certificate from the OEM should be provided.
7. Technical Data Sheet of the quoted product should be attached with the quotations.
8. The Quotation should reach the undersigned on or Before 5 Pm on 2nd January 2023 by post/courier.

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