INDIAN INSTITUTE OF TECHNOLOGY KANPUR

Department of Electrical Engineering

Enquiry No.: **EE/SA/INQ/2016-17/06**

Opening Date: **13-Dec-2016**Closing Date: **2-Jan-2017**

Sub: Inquiry for solar PV array simulator

We are interested in purchase of solar PV array simulator of the following configuration. Our organization is an educational institute of repute and liable to get **educational discount** from the manufacturer / supplier. Please specify the discount separately.

There will be **two steps in the tender process**:

- 1. Technical specifications should be put in one sealed envelope. SPECIFY company name and model number, and attach detailed technical specification for each part/component. Must also include detailed technical brochure.
- 2. Financial details i.e. budget quotation should be in a separate sealed envelope. This quotation will not be opened if technical details of the product do not match with our specifications.

Please send your **Sealed Quotation** to the undersigned for the same. The envelope should be marked as "**Solar PV Array Simulator - EE/SA/INQ/2016-17/06**"

Items required:

Item required	Specifications	Quantity
Modular PV	Total output power of 5kW. The Modulator Solar Array	1
Solar Array	Simulator should have open circuit voltage $(V_{oc}) = 600 \text{ V}$, short	
Simulator	circuit current l _{sc} ≥ 8.3A. Should be able to simulate electrical	
	characteristics of any type of solar PV panels. Output voltage	
	noise should be $\leq 2V_{p-p}$. Load regulation $\leq \pm 0.1\%$ of rated	
	voltage (in constant voltage mode) and ≤± 0.2% of rated	
	current (in constant current mode). Programming Accuracy:	
	For voltage 0.2 % of V _{max} and 0.5% of I _{max} . Operating	
	temperature 0°C to +40°C (clearly mention de-rating if any).	
	Should have provision to connect to computer using Ethernet.	
	Should be programmable (feeding I-V characteristics of solar	
	PV array) using computer. Should have monitoring of various	
	operating parameters using computer. Should have over-	
	voltage, over-current and over-temperature protection	
	features. Should be in either of 1U, 2U or 3U size. There	
	should be power on/off switch on product. Should be capable	
	of being used as a dc regulated power supply. Should be	
	capable of operation on 230V, 50Hz nominal single phase ac	

supply or 400V, 50Hz nominal three phase ac supply. Should have at least 3 years warranty. Warranty must include/cover parts, labour and transportation cost.

Software to interface with computer must be included in the quotation.

Note:

- 1. Your quotation shall contain Authorization Letter from manufacturer.
- 2. Quotation must be valid for minimum of 90 days.
- 3. Delivery period should not be more than 10 weeks and delivery should be at IIT Kanpur or CIF New Delhi.
- 4. Send complete detail of the product(s).
- 5. Payments terms: 90% on installation and 10% on satisfactory report.
- 6. Price must include all taxes and charges (including delivery, installation etc.)
- 7. IITK has exemption on excise and custom duty. Suitable certificate would be provided if required by the supplier.
- 8. All prices are to be FOR IIT Kanpur or CIF New Delhi.
- 9. The Institute reserves the right of accepting and rejecting any quotations without assigning any reason.

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