

Indian Institute of Technology Kanpur
Department of Physics

Enquiry no.: PHY/SMT/EQP/DRDO/2016/5

Enquiry date: 16/05/2016

Closing date: 06/06/2016

Sealed quotations are invited for **One Detector and compatible dual-channel power/energy meter** with following specifications. **Sheet showing the extent of compliance should be attached:**

1. Detectors – 3 sets.

(i) Thermopile sensor – 1 number

wavelength range	200 nm to 11 μm (or more)
Maximum power	10 W
Noise level	$< 1 \mu\text{W}$
rise time	1 sec or better
Maximum average power density	25 kW/cm ²
Maximum energy density	1-2 J/cm ²
active area	2 cm ²
heat sink for proper cooling	suitable heat sink for proper cooling
Resolution	$< 1 \mu\text{V}$ / responsivity value

(ii) Photodiode with fiber-optic input : One for each wavelength range

wavelength range	300 – 1100 nm; 750 – 1800 nm
maximum measurable power	5mW
rise time	2 μs
active diameter	3mm
maximum pulse energy	$\mu\text{J}/\text{cm}^2$
connector	FC/PC connector as an option in addition to free space measurements, include attenuators if required
resolution	10 pW

2. Dual-channel power / energy meter:

A single meter compatible for all the detectors mentioned above; if not, specify multiple meters. Dual-channel, both power and energy measurement essential, maximum rep rate of 100-200 kHz, analog output essential, output display TFT LCD, VGA.

3. Computer interface and data storage: preferred.

4. USB and RS-232 interfaces required.
5. Instruction manual with clear instructions and trouble-shooting tips.
6. Installation on-site upon purchase, and demonstration of all parameters.
7. Any additional accessory useful for operation such as power cords for India should be included and clearly specified as essential or optional. All adaptors required to connect the detector to the meter or the meter to the computer should be quoted separately as accessories.

The supplier should be willing to supply the complete test report of the unit while shipping the item.

Refurbished units are not acceptable.

Terms and conditions:

- Quote should be made in two parts: Technical bid and Financial bid, separately in sealed envelopes.
- The equipment should be provided with a warranty of 1-3 years.
- Technical specifications along with the extent of compliance should be mentioned.
- Quotations that do not provide a compliance sheet will be rejected.
- The delivery period should be specifically stated.
- Financial bid for the product whose technical bid is not acceptable will not be opened. Any quote with the financial bid included in the technical bid will be summarily rejected.
- The sealed envelopes with the quotes should be superscribed with the inquiry number and whether it is a technical or a financial bid.
- The delivery period should be specifically stated.

For delivery to IIT Kanpur

- Maximum educational discounts should be applied – this equipment will be used in a laboratory that will support research as well as teach and train students.
- IIT Kanpur is exempted from payment of Excise Duty under notification no.10/97
- Quotes should have a minimum validity of 90 days
- Quotes should be made options for the either of the following delivery modes
 - o Ex-works for pickup by our world-wide transport provider
 - o FOB in country of origin
 - o CIF, New Delhi

Address the quotations to:

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