

Indian Institute of Technology Kanpur Samtel Centre for Display Technologies

Enquiry number: SCDT/2013-14/02 Date: June 19, 2013

Sealed Quotations are invited for the supply and installation of Encapsulation and UV Curing System for Organic Solar Cell devices as per the following specifications:

<u>Integrated Solution for encapsulation substrate pressing and UV Curing system for encapsulating</u> Organic Semiconductor devices

<u>Technical specification for Encapsulation pressing system.</u>

- 1. Small foot print area not greater than-W300mm X L480mm X H500mm
- 2. System should be clean room compliant with no external grease or oil used for lubrication
- 3. Complete system will be integrated with a glove box.
- 4. System should have an option to use different sizes of substrates from 15x15 mm to 150x150 mm using additional jigs.
- 5. Travel Ranges of pressing arm > 200mm in x axes on rails, NO y axis movement should be there, and motion Z directions should be limited to < 200um (open loop travel)
- 6. Repeatable positioning to have a feature of self centering with all size of substrates within 2% deviation from true center in direction of movement.
- 7. Active axes X and Z for pressing arm with proper safety interlocking for avoiding vertical movement till horizontal clearances are there.
- 8. Parallel rectangular press with the glass substrate can be adjusted using screws to align if needed.
- 9. Pneumatic based controlled movements with pressure adjustments from 0.1 bar to 2 bar range
- 10. Push buttons for operations.
- 11. Small LCD Screen for monitoring, 1" x 4" or better.
- 12. Automatic and Manual mode options should be available.
- 13. Option for Computer interfacing available as an option
- 14. Should be capable of external synchronization / control for UV system

Required features UV Curing System

- 1. UV Lamp with power Min. 1 KW Max. 3.6 KW, Wavelength Min. 230nm, Max. 450nm. Ushio make or equivalent.
- 2. Input power 200 240V
- 3. Synchronization with encapsulation pressing system,
- 4. UV lamp shut down feature at high temperature, using thermostat.
- 5. Emergency switch.
- 6. Voltage and temperature display screen.
- 7. Programmable timer for UV lamp and shutter
- 8. Manual and automatic shutter open/close.
- 9. Hot air exhaust out let.
- 10. Powder coated/ anodized box, designed to fit under the glove box through quartz window, sizes 500mm (W) 500mm (D) 900mm (H) or less.
- 11. All safety regarding UV lamp and operator are taken care.

Terms and Conditions

- 1. Technical and financial details should be in separate envelope.
- 2. Maximum educational discounts should be applied.
- 3. Validity of quotation should be at least for 60 days
- 4. Prices should be on FOR IIT Kanpur & should include the installation and training cost.
- 5. Institute is exempted for payment of Excise Duty under notification No. 10/97
- 6. Warranty/Guarantee should be clearly mentioned.
- 7. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection)
- 8. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
- 9. The delivery period should be specifically stated. Earlier delivery may be preferred.
- 10. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.

Kindly send the quotation in sealed envelopes latest by 26.06.2013 to the following address;

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