

Procurement of Printer Capable of Printing Functional Material Inks at IISc

Specifications of the Product:

Items: A drop-on-demand printer capable of printing various functional inks with high positional and volume accuracy. The technical specifications of the item should be as follows:

A. Specifications

- (i) The printer should be capable of handling substrates of approximately A4 size. The minimum substrate size to be handled by the printer should be 8 inch by 10 inch.
- (ii) The relative motion between print-head and stage/substrate holder should allow for positioning in x, y and z co-ordinates. Here (x, y, z) are orthogonal vectors with (x,y) being in the plane of the stage/substrate holder.
- (iii) The stage/substrate holder should have a vacuum based gripper for the substrate.
- (iv) The positional accuracy in the (x,y) direction must be consistently less than or equal to 25 μm .
- (v) The stage/substrate holder should have the provision of heating to at least 60 C \pm 5 C.
- (vi) There should be an inbuilt microscope with a camera to view the substrate before/during/after printing. The microscope should have a magnification of at least 50 X. The microscope-camera along with any software should allow measurement of feature sizes.
- (vii) The printer should be able to operate when the ink in the reservoir is as low as 10 ml or below.
- (viii) The system should have its own software (in English) compatible with commonly used standard operating systems.

B. Details of Running Costs and Support

The vendor must mention the running and maintenance costs. Particularly

- (i) Cost of cartridges if applicable
- (ii) Cost of complete support/year beyond the warranty period.

C. Other Requirements

- (i) The vendor should have sold at least 20 units in India and preferably at least 1 unit at IISc.

D. Terms and Conditions

- (i) Vendors must send a **separate technical and financial/price bid in sealed envelopes**. Vendors who include price information in the technical bid will be disqualified.
- (ii) Technical and financial/price bids are to be sent within three weeks of the formal purchase request and before the deadline mentioned in the tender head.
- (iii) The technical bid must clearly indicate specification agreements/disagreements mentioned in the tender.

- (iv) The technical bid must clearly indicate details of running costs and compatibility with other requirements stated in the tender.
- (v) The price bids must offer CIF Bangalore Prices
- (vi) The delivery period should be clearly indicated in the technical bid
- (vii) The two-bid process works in two stages. In the first stage, the technical bid will be opened. Only those vendors whose products satisfy the technical requirements will be selected to the next stage of the purchase. In the second stage, the financial/price bid will be opened. The vendor offering the lowest quote will be chosen.

It is therefore important that vendors send separate technical and financial/price bids in sealed envelopes.

IISc reserves the right to investigate the validity of the claims made in the technical bid by any means necessary. IISc also reserves the right to cancel the tender at any time without assigning any reasons whatsoever.



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