



Department of Aerospace Engineering

September 18, 2018

Quotation notice

Sealed quotations are invited from the authorized dealer/distributors by undersigned, for creation of **Multi material Desktop 3D Printer**

The detailed specifications for these are appended below. The quotations have to reach in the Aerospace Engineering Department on or before 07/10/18.

Enquiry No. : **IITK/AE/ABHI/18/03**

Opening date : **1000hrs, 18/09/18**

Closing date : **1500hrs, 07/10/18**

Multi material Desktop 3D Printer

Printer	<ul style="list-style-type: none"> • Should be Rugged, all-metal design • Should Include interchangeable mounting system • Should support State-of-the-art, plug-and-play electronics (Gib System) • Should have Ready for upgrade/expansion options to higher configurations • Should be Compatible with large volume extruders
Material Support	<ul style="list-style-type: none"> • Ability to support a wide range of materials, including ABS, BendLay, Clay (including metal and precious metal clay), Flex45, LayBrick, LayWood, NinjaFlex, Nylon (including Taulman 618, 645 and 910), PC, PEEK, PET, PLA, Plasticine, PlastInk Rubber, Play-Doh, PP, PPSU, PVA, RTV Silicone, Sculpey, Sugru, T-Glase, Ultem, and custom filaments and emulsions. • No proprietary cartridges or restriction on filament sourcing for printers.
Motion Control	<ul style="list-style-type: none"> • Four Precision Ball Screws in Z-axis • Precision Linear Bearing System in X, Y, and Z Axes
Nozzle Dia.	Should be capable of supporting multiple Dia Nozzles
Extruders	Modular
Filament Dia	Standard Dia should be 1.75 mm.
Positional Resolution	<ul style="list-style-type: none"> • X Axis 6 microns • Y Axis 6 microns • Z Axis 1 micron
Build Size	400x300x250mm X/Y/Z or better
Software	<ul style="list-style-type: none"> • Pre-processing and slicing • Support standard STL files for 3D Printing • Support Windows/Mac

Electronics	<ul style="list-style-type: none"> • 150+ MHz 32-bit ARM processor or better • Modular, micro-stepping motor-drivers with closed-loop encoding • Integrated, Dual CAN-bus architecture • “Smooth Move” motion control technology firmware • Integrated camera
Interface	Tablet PC with <ul style="list-style-type: none"> • USB: Four USB 2.0 Ports (External) • WLAN: WiFi Capable Or better
Power Requirements	100-240, 50-60 Hz.
Power off Resumption	Yes
On board camera	Yes

Terms & Conditions of the quotations are as under :

1. The quotations should be submitted in the properly sealed envelop, addressed to the undersigned. The enquiry no. and date should invariably quoted on the top of the envelope.
2. The rate quoted should be inclusive of sales tax and other taxes including freight charges (if any).
3. The quotations shall remain valid for two months from the date of opening.
4. The Institute reserves the right of accepting or rejecting any quotations without assigning any reason thereof.

Your early response in this matter would be highly appreciated.

Sincerely,

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