**Department of Physics, Indian Institute of Technology**

 **IIT.P.O. Madras-600 036**

Ref. No. Date: 14 / 04 / 2017

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| **PHY** | **2017** | **011** | **STORES** |

To Whom It May Concern:

Dear Sir,  **Due date: 30 / 04 / 2017**

Please find below the specification of an the NIM Powered Crate/Mainframe we require for purchase. Kindly send us a quotation by the due date mentioned above.

Minimum specification for **NIM Powered Crate / Mainframe** (Quantity 1 – 5 nos. please quote unit price)

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| **NIM Powered Crate** |
| **Sr. No** | **Parameter** | **Value** |
| 1 | Mechanics | 19" x 5U bin, 12 slot, non ventilated |
| 2 | Mains input | 220 VAC or 115 VAC, 50-60 Hz. |
| 3 | Fuse External | 4 A Class T @ 300W 230 Vac 8 A Class T @ 300W 115 Vac |
| 6.3 A Class T @ 600W 230 Vac 15 A Class T @ 600W 115 Vac |
| 4 | Output power | 600 W:45A @ ±6V; 8A @ ±12V; 8A @ ±24V20A @ ±6V ; 15A @ ±12V ; 8A @ ±24V45A @ ±6V ; 18A @ ±12V ; ±24V not present |
| 5 | Power requirements | 610W and 1150W (for 300W and 600 W) at full load |
| 6 | Isolation | CE acc. to EN 61010 |
| 7 | Noise and ripple | < 3 mVpp @ ±6V, ±12 V, ±24 V (Typ.) |
|  | < 5 mVpp @ ±6V, ±12 V, ±24 V (Max.) |
|  | Output Voltage Characteristic | dual tracking for all ±DC outputs |
| 8 | Soft start |
|  | DC output calibration (manually) |
| 9 | Output Current Characteristic | Foldback (Isc < 3 A Imax = I nominal + 15%) and Trip Off |
| 10 | Output Impedance | 0.3 mOhm static |
| 11 | Status control | ±6V, ±12V, ±24V LED and test point; GND test point; ALARM signal, STATUS, OVERHEAT and OVERTEMPERATURE LED |
| 12 | Temperature sensors | Power Supply: nr. 4 @ 300W nr. 2 @ 600W |
| 13 | Over Voltage Protection | Trip Off when the output voltage > 105% of nominal voltage |
| 14 | Under Voltage Protection | Trip Off when the output voltage < 95% of nominal voltage |
| 15 | Over Current Protection | Trip Off when the current > programmable Iset value |
| 16 | Over Temperature Protection | Trip Off when temperature of heat sink > 70° C or when transformer temperature > 110° C |
| 17 | Operation | 0 - 40°C without derating |

**Accessories**

The vendor may quote optional accessories which may be required with the instrument mentioned for purchase together but will not be used for price comparison.

Please provide a clear warranty statement.

Please send the quotation (technical and price details) by email (signed and scanned) OR hard copy before the due date.

Please mark reference number on top of the quotation.

 Yours Sincerely,

**Sivarama Krishnan**

**Co-ordinator**

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