

**GOVERNMENT OF INDIA
BHABHA ATOMIC RESEARCH CENTRE
TECHNICAL PHYSICS DIVISION
PURNIMA Laboratories**

Ref: TPD/NSRPS/MF/2020/ 19

Date: 23-11-2020

Due Date: 04-12-2020

Sub : Minor Fabrication - invitation of quotations.

1. Quotations are invited for the minor fabrication job, as per the enclosed specifications.
2. Bidder shall quote for fabrication of these components with material.
3. Taxes and excise duties shall be quoted separately.
4. The quotations must reach to the Head, TPD within 12 days of the date of this letter and must be sent by **Indian Speed post / Indian Post** only in a sealed envelope superscripted with the above reference number and due date given above
5. The address on the envelope should read:

**Head,
Technical Physics Division
Bhabha Atomic Research Centre
PURNIMA Labs., Trombay, Mumbai 400085.**

6. The bidder shall have to take an insurance policy against any material issued to him by the purchaser
7. The fabrication work shall be subject to inspection by our representative. The finished components shall not be dispatched prior to approval by our representative at the bidder's works. Necessary inspection facilities should be provided to our engineers during fabrication at bidder's premises.
8. The bidder shall deliver the finished components and install it after approval by our representative, within 60 days from the date the firm purchase order issued to the bidder. The finished components and the scrap from the free issue material shall be delivered by the bidder at PURNIMA Laboratory, Technical Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085.
9. Head, TPD, BARC, reserves the right to accept/reject any or all quotations without assigning any reason.
10. The bidder should furnish the GST, PAN and TIN numbers in their quotations without which the quotations will be rejected.
11. Quote for each part separately.
12. Detailed drawing will be made available after issue of order.
13. Clarifications for executing the order can be sought after issue of order.

Head,TPD

Fabrication and supply of Portable NIM-crate

Qty: 2nos.

Specifications:

Type	Portable 5U NIM crate with 5 free slots for use
Mains input	230 VAC, 50 Hz
Maximum Total Output Power	150 W
Power requirements	280 W at full load
External Fuse	External 2 A, class T (230 VAC)
Output power	5 A @ $\pm 6V$; 3 A @ $\pm 12 V$; 1.5 A @ $\pm 24 V$
Load Regulation	<ul style="list-style-type: none"> • $< 0.5 \%$ for 10-100% load change, $< 0.02 \%$ for $\pm 10\%$ line change • $\pm 6V$: $< 30 \text{ mV}$ for 10-100% load change, $< 1\text{mV}$ for $\pm 10\%$ line change • $\pm 12 V$: $< 60 \text{ mV}$ for 10-100% load change, $< 2\text{mV}$ for $\pm 10\%$ line change • $\pm 24V$: $< 120 \text{ mV}$ for 10-100% load change, $< 5\text{mV}$ for $\pm 10\%$ line change
Isolation	CE acc. to EN 61010
Ripple	$\pm 6V < 5 \text{ mVpp}$; $\pm 12 V < 8 \text{ mVpp}$; $\pm 24 V < 10 \text{ mVpp}$
Transient response recovery	0.15 ms for recovery to $\pm 1\%$ of voltage for 10-100% load change
Output Impedance	0.6 mohm static
Output Voltage Characteristic	dual tracking for all $\pm DC$ outputs; Soft start; DC output calibration
Output Current Characteristic	OVC protection / Trip Off
Over Voltage Protection	Trip Off when the output voltage $> 130\%$ of nominal voltage
Under Voltage Protection	Trip Off when the output voltage $< 70\%$ of nominal voltage
Over Current Protection	Trip Off when current: $> 6A @ +24V$, $> 2A @ -24V$, $> 6A @ +12V$, $> 3.75A @ 12V$, $> 10A @ \pm 6V$
Over Temperature Protection	Trip Off when temperature $> 75^\circ \text{ C}$
Status control	Fail/Status LED signal;

A. BIDDER QUALIFICATION:

Used materials/ recycled items/ repaired items **will not be acceptable and will be rejected.**

B. WARRANTY:

Warranty against manufacturing defect for a minimum period of one year after installation and final acceptance shall be provided. The warranty period shall automatically be extended for down time period.

C. ACCEPTANCE CRITERIA

- The products should be provided along with necessary certificates of testing & quality assurance.
- Stability for load regulation, ripple and transient response recovery will be checked and should be within limits as specified in specifications.