

(Institute of National Importance), Bengaluru- 560 029 राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का संस्थान), बेंगलुरु - 560 029

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

(Deliana Deliana 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811

Website http E-mail aaos

http://www.nimhans.ac.in/tender aaos@nimhans.ac.in



#### E-Procurement Tender No. NIMHANS/2020-21/IND658

07.10.2020

# TENDER NOTIFICATION (Through Karnataka e-procurement portal only)

The Director, NIMHANS invites tender from eligible tenderers through the Karnataka Government E-Procurement portal for supply of following equipment.

Sl. No.	Name of the Item	Quantity (in No.)	EMD (in Rs)
1.	40 kVA MODULAR UPS for Neurosurgery Department - MOT	01	20,000/-

#### **Tender Schedule**

Downloading of Tender documents from website - https://eproc.karnataka.gov.in/eportal/index.seam - From 08.10.2020 Onwards		
Last date for tender enquiry	19.10.2020 upto 11:00 AM	
Tender submission last date and time	02.11.2020 upto 11:00 AM	
Technical bid will be opened online by the authorized officer on	03.11.2020 at 11:00 AM	

Sd/-, Director

# TENDER DOCUMENT Terms and conditions

- 1. The bid documents for the above items should be addressed to "The Director, National Institute of Mental Health & Neuro Sciences, Post Box No. 2900, Hosur Road, Bengaluru 560 029, Karnataka, India" and should uploaded in E Procurement portal only on or before the due date.
- 2. The tender bid should be valid for 120 days from the due date. NIMHANS, Bengaluru will not take any responsibility for any technical issues.
- 3. Earnest Money Deposit (EMD):
  - **a.** The (EMD) shall be denominated in Indian Rupees and should be paid in the e-procurement portal as per the facility provided.
  - **b.** The EMD shall not bear any interest and will be refunded to
    - **a.** successful tenderer on receipt of Agreement and Bank Guarantee.
    - **b.** unsuccessful tenderer upon finalization of tender bid and award of tender to successful bidder.
    - all the tenderers if the tendered item is cancelled or retendered.
- **4.** The tender documents and all correspondence's relating to the bid should be in **English language only.**



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का संस्थान), बेंगल्र - 560 029

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

©Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http://www.nimhans.ac.in/tender E-mail aaos@nimhans.ac.in



### E-Procurement Tender No. NIMHANS/2020-21/IND658

07.10.2020

- 5. Technical bid should comprise of (uploaded copy of documents should be self attested, stamped and better quality preferably .pdf format)
  - **a.** Brochure/Catalogue and Data sheet of the equipment.
  - **b.** Technical Compliance Statement
  - **c.** Proprietary certificate from the manufacturer mentioning the unique technology or feature/s mentioned apart from the brand name (If applicable).
  - **d.** Pre requirements required at the installation site (Before submitting the bid, the tenderer should make pre-visit to the installation site and indicate the requirement along with the price bid wherever necessary)
  - **e.** Delivery Period of the item to be supplied and Time required for installation from the date of purchase order has to be indicated.
  - **f.** List of Institutes where the equipment has been supplied with copy of purchase orders.
  - g. Copy of GST, PAN, TIN document
  - **h.** Whether tenderer is manufacturer / accredited agent / sole representative, indicate details of principal's name & address. The offers of tenderer who are not manufacturer or direct authorized agent will be summarily rejected. Sub- distributors will not be accepted.
  - i. Non blacklisting certification that the firm has not been blacklisted in the past by any government/Private institution and certification for No Vigilance/CBI case pending against the firm/supplier by making an affidavit on non judicial stamp paper of `100/-.
  - j. Declaration towards acceptance of all terms and conditions should also be provided.
- 6. Financial Bid should comprise of
  - a. Quotation should be only for DAP in INR only i.e. NIMHANS Door Delivery Price inclusive of main equipment cost, each article wise/spares rates, taxes, other Government levies, Customs duty, any local agency commission, transportation, delivery of the equipment to the Institute premises, installation and commissioning etc. with a detailed break up mentioning manufacturers name, License number and name of the brand/make. Tender bids without price bid/quotation will be rejected.
    - Detailed breakup of the cost should be provided under icon "Action column" by clicking the % symbol which will be mentioned as Added statutory components.
  - b. The tenderer should also provide the quote for regular servicing/maintenance duly mentioning the number of visits per annum for the AMC & CMC period after the warranty period is over. AMC & CMC should be quoted in INR only under Action column in E procurement portal.
    - i. If the tenderer is quoting in Indian Rupees (INR) for items NOT MANUFACTURING IN INDIA (NMIC), the CUSTOM DUTY EXEMPTION CERTIFICATE WILL NOT BE ISSUED BY THE INSTITUTE. The Rate quoted should be inclusive of Custom duty & other incidental charges.
- 7. Successful tenderer decision will be made on the basis of total cost of the equipment (Inclusive of all miscellaneous charges as mentioned in Clause 6a).



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का संस्थान), बेंगलुरु - 560 029

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

(D)Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http://www.nimhans.ac.in/tender E-mail aaos@nimhans.ac.in



### E-Procurement Tender No. NIMHANS/2020-21/IND658

07.10.2020

- 8. The cost of the "40 kVA MODULAR UPS with related accessories" will be freezed for 1 Year from the date of purchase order; however Institute reserves the right to procure/reject the purchase of equipment with the successful tenderer on repeat order basis within 1 year from the date of purchase order.
- **9.** The tender bids (technical and price bid) should be typewritten; every correction in the tender should be initialed along with seal by the tenderer, failing which the tender will be rejected. All pages of the bid submitted must be signed along with seal and sequentially numbered by the tenderer.

#### 10. Evaluation of Bids:-

The technical bid of the tenderer will be evaluated to determine whether

- **a.** They are complete with respect to specifications.
- **b.** They are free from computational errors.
- **c.** The requisite documents have been submitted and properly signed.

### 11. Tender Opening:

- **a.** The Technical bids will be unlocked through E procurement portal in the Committee Room, Adjacent to Registrar Chamber, NIMHANS, Bengaluru on the date specified in presence of tenderers or their representatives who choose to attend.
  - The Tenderers' or representatives who are present shall submit authorization letter along with copy of Photo id proof and shall sign a register evidencing their attendance.
- **b.** The Financial bid of the technically qualified tenderer/s only will be opened on a notified date.
- 12. Equipment and its accessories should be covered with minimum warranty period of 2 years for normal or regular wear & tear from the date of complete installation (Ready to use in all respects). In case of software's, the validity of the license key should be clearly mentioned and should have user define provision with option to switch over from one system to other system of the same kind within the validity period.

#### 13. Software Updates:

The selected firm for the supply of tendered item should provide free updates of software up to 5 years from the date of complete installation.

- **14.** Supply of spares should be guaranteed for a minimum period of 10 years from the date of supply or from the date of cessation of production of the model for 10 years, whichever is later, at the rates prevailing against payment.
- **15.** Any modification or revision of bids after submission will not be entertained under any circumstances. Conditions such as "subject to the availability of stocks", supplies will be made as and when supplies received from the principles etc., will not be considered under any circumstances.
- **16.** A tenderer having once given a tender bid shall not withdraw it after its acceptance/opening and if does, the EMD paid by the tenderer will be forfeited and the tenderer is liable to make good the loss sustained.



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का संस्थान), बेंगलुरु - 560 029

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

@Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http E-mail aaos

http://www.nimhans.ac.in/tender aaos@nimhans.ac.in



### E-Procurement Tender No. NIMHANS/2020-21/IND658

07.10.2020

- 17. If required, the tenderer should demonstrate the quoted model of the equipment at the institute during the technical evaluation, failing which their bid/offer shall be rejected. The tenderer will be intimated that they should get ready for demonstration. No request for extending time for demonstration will be entertained. Failure to demonstrate, their offer will be rejected.
- **18.** The tenderer should supply the circuit diagram and instruction manual of the tendered equipment/s at the time of supply of the equipment.
- **19.** Necessary training / instructions on operation of the system should be given by the qualified engineers of the tenderer firm to NIMHANS technical staff/s at free of cost after completion of the installation.
- 20. The successful tenderer should immediately submit an acceptance letter duly signed and sealed for the rate/s and offers agreed by both the parties to the Head of the Institution within reasonable time on receipt of the Purchase Order (Agreement Specimen will be enclosed with Purchase order & Stamp duty to be paid by the tenderer). The successful tenderer should also furnish a Bank guarantee only from a Nationalized bank to the extent of 10% of the total purchase order value, valid for 60 days beyond the completion of the warranty period of the equipment, no split period bank guarantee will be entertained.

In the event of the successful tenderer failed to supply the item/execute the agreement/submit the Bank Guarantee the EMD deposited by them shall stands forfeited.

### 21. Payment terms:

Payment will be made only after good working condition of the equipment certified by the end user. NO ADVANCE PAYMENT WILL BE ENTERTAINED.

#### 22. Uptime Guarantee:

Penalty Clause for non-functioning of equipment in term of hardship to the patients and financial loss to institute: 95% up time of 365 days (24 hours a day) that is from the day of successful handing over of the whole complex. The company takes the responsibility for the functioning of all the components and equipment, including the third party items supplied and included in the project. The total downtime annually for any reason/involvement of any of the components cannot exceed 5% (all inclusive). Subsequently if downtime exceeds 5% of 365 days, 1% of PO Value will be levied as penalty for every 24 hours of downtime until 7 days from the day of breakdown. If downtime exceeds 7 days the penalty will be 2% of PO Value from the date on which the equipment broke down beyond 5% permissible downtime. In addition to this, warranty period will be extended at double the rate of the downtime period.

- 23. If, at any time, during the said period, the supplier reduce the said prices of such Materials/Equipment or sales such Materials/Equipment to any other person/organization/ Institution at a price lower than the chargeable, the company shall forthwith notify such reduction or sale to the Director, NIMHANS and the price payable for the Materials supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.
- **24.** The losses to NIMHANS, Bengaluru, if any incurred on account of purchase made elsewhere by failure, neglect or refusal on the part of the tenderer to supply according to the terms of



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का संस्थान), बेंगलुरु - 560 029

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

@Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http://www.nimhans.ac.in/tender E-mail aaos@nimhans.ac.in



### E-Procurement Tender No. NIMHANS/2020-21/IND658

07.10.2020

agreement will be recovered from them. If any article or things supplied by the tenderer have been partially or wholly used or consumed in the hospital and they are subsequently found to be in bad condition, unsound, inferior in quality or description, not in accordance with samples or otherwise faulty or unit for use, the wholesome of the contract price or price of such articles or things will be recovered from the tenderer. The tenderer will not be entitled for any payment whatsoever, for such articles for infringements of the stipulation of the conditions or for justifiable reasons the contract may be terminated by the Director and the tenderer shall be liable for losses sustained by the NIMHANS on the consequences of the termination which may be recovered from the EMD/Bank Guarantee or from their invoices due to them. In the event of such amount being insufficient, the balance will be recovered personally from the tenderer.

- **25.** Any corrections/changes in the tender will be uploaded as corrigendum in the NIMHANS and E procurement websites only.
- **26.** If the tender last/opening date falls on any general/government/institute holiday(s), then the successive dates will be postponed by equivalent days of holiday(s), however the time remains unchanged.
- 27. The Director reserves the right of ordering/not ordering/cancelling/increase or decrease the quantity and to reject any or all tender quotations without assigning any reason. The decision of the Director, NIMHANS, Bengaluru, shall be final in all the controversies that may arise in the matter. Any dispute arising out of this will be subject to the jurisdiction of the Court in Bengaluru.
- **28.** Failure to adhere any of the above terms and conditions the bid(s) may be rejected and EMD may be forfeited.
- **29.** None of the terms and conditions of the supplier shall be applicable to the purchase contemplated hereunder, irrespective of it being attached to any documents to be provided to NIMHANS. Such exercise shall have no meaning and binding effect unless the same is accepted by NIMHANS in writing.

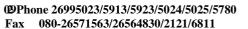
NOTE: Please keep checking the NIMHANS and E-Procurement websites regularly for any further updates.

Sd/-, Director



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का संस्थान), बेंगलूरु - 560 029

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029



E-mail

Website http://www.nimhans.ac.in/tender aaos@nimhans.ac.in

Yours faithfully,

Signature of Tenderer & seal



### E-Procurement Tender No. NIMHANS/2020-21/IND658

07.10.2020

### **DECLARATION** (TO BE GIVEN BY THE TENDERER)

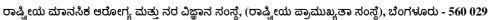
Na	ame of the Equipment: 40 kVA Modular UPS for Neurosurgery Department - MOT - 01 No
Na	nme of the company :
To	
Na (In Po	ne Director, ntional Institute of Mental Health & Neurosciences nstitute of National Importance) st Box No. 2900, osur Road, Bengaluru – 560 029
De	ear Sir,
2.	I/We hereby submit my/our tender for the  I/We have made requisite payment against EMD as per the tender document vide reference No. & date, else my tender bid may be rejected.  I/We have gone through all terms and conditions of the tender documents before submitting the same.
4.	I/We hereby agree to all the terms and conditions, stipulated by the NIMHANS, in this connection including delivery, warranty, penalty etc. Quotations for each group are being submitted and shall be considered on their face value.
5.	I/We undertake to sign the contract/agreement, if required, within reasonable time from the date of issue of the letter of acceptance, failing which our/my security money deposited may be forfeited and our/my name may be removed from the list of suppliers at the NIMHANS, Bengaluru.
IN	OTE: ALL TERMS & CONDITIONS SUCH AS TAXES/LEVIES ETC, HAS BEEN DICATED IN THE QUOTATIONS FAILING WHICH IT WILL BE PRESUMED THAT HE RATES ARE INCLUSIVE OF ALL TAXES/LEVIES AND OTHER TERMS AND

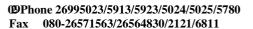
**Purchase section** Page 1 of 7

CONDITIONS ARE ALSO AS PER YOUR REQUIREMENTS.



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का संस्थान), बेंगलुरु - 560 029





Website http://www.nimhans.ac.in/tender E-mail aaos@nimhans.ac.in



### E-Procurement Tender No. NIMHANS/2020-21/IND658

07.10.2020

# CHECK LIST (TO BE FILLED BY THE TENDERER)

2. Name & address of the manufacturer  3. Name of the equipment & Model Quoted  4. Validity of the quotation  a. Delivery Period  b. Warranty Period  c. Installation Period  a. Application Fee submitted  b. EMD submitted  c. Brochure/Catalogue uploaded  d. Technical Compliance Statement  Manufacturer Proprietary certificate uploaded	1.
4. Validity of the quotation  a. Delivery Period  b. Warranty Period  c. Installation Period  a. Application Fee submitted  b. EMD submitted  c. Brochure/Catalogue uploaded  d. Technical Compliance Statement  Manufacturer Proprietary certificate uploaded	2.
5. Delivery Period b. Warranty Period c. Installation Period  a. Application Fee submitted b. EMD submitted c. Brochure/Catalogue uploaded d. Technical Compliance Statement  Manufacturer Proprietary certificate uploaded	3.
5. b. Warranty Period 2 years  c. Installation Period  a. Application Fee submitted b. EMD submitted c. Brochure/Catalogue uploaded d. Technical Compliance Statement  Manufacturer Proprietary certificate uploaded	4.
c. Installation Period  a. Application Fee submitted b. EMD submitted c. Brochure/Catalogue uploaded d. Technical Compliance Statement  Manufacturer Proprietary certificate uploaded	
a. Application Fee submitted b. EMD submitted c. Brochure/Catalogue uploaded d. Technical Compliance Statement Manufacturer Proprietary certificate uploaded	<b>5.</b>
b. EMD submitted c. Brochure/Catalogue uploaded d. Technical Compliance Statement  Manufacturer Proprietary certificate uploaded	
c. Brochure/Catalogue uploaded d. Technical Compliance Statement  Manufacturer Proprietary certificate uploaded	
d. Technical Compliance Statement  e. Manufacturer Proprietary certificate uploaded	
e. Manufacturer Proprietary certificate uploaded	
e. uploaded	
uploaded	
f. Pre requirements details uploaded	
Tender Bid uploaded details  g. List of users uploaded	6
(YES or NO against each item)  h. Copy of GST/PAN/TIN & Bank details	U.
uploaded	
i. Distributor authorization letter uploaded	
j. Non-blacklisting certification uploaded	
k. Declaration enclosed	
1. Equipment Door delivery cost quoted	
m. AMC & CMC cost for 5 years post	
warranty period	
7. Training will be provided (YES or NO)	7.
Whether after sales, service is	
a. available in Bengaluru? If yes, quote	
8. the details	8.
What is the arrangement for post	-
b. contract / warranty monitoring of the	
equipment	
9. Any other information (Enclosed separately in letter head – YES or NO).	9.

Signature of Tenderer along with seal



### NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES

(Institute of National Importance), Bengaluru- 560 029

राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का स्थान), बेंगल्र -

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811

Website http://www.nimhans.ac.in/tender

560029.

E-mail aaos@nimhans.ac.in



### **PURCHASE SECTION**

### TENDER FOR THE SUPPLY OF "40 kva MODULAR UPS for NEUROSURGERY DEPARTMENT - MOT"

<b>Department / Section</b>	Bio Medical Engineering		
End User Contact Details		Quantity Required	01 No.
Name Smt. Sindu M G		Quantity Kequired	<b>01 NO.</b>
Designation	Chief Biomedical Engineer		
Mobile No.	+91 - 9480 829 700		
Office No.	+91 - 80 - 2699 5700	EMD	Rs 20,000/-
Email sindumg@nimhans.ac.in			
	SEMENTAL HE	50	

Sl. No.	Specifications	Requirement
1	Capacity (in kVA / kW)	40 kVA/36 kW 3-Phase Input / 3-Phase Output
2	Technology & Capability	<ul> <li>a. True Online configuration double conversion UPS.</li> <li>b. Frame Capacity Minumum 80 KVA</li> <li>c. Modular &amp; Scalable UPS with hot swappable Power Module of 20kVA*2 nos now &amp; 20kVA*2 nos in future</li> <li>d. DSP (Digital Signal Processor) / Microprocessor based control, using SCR/IGBT devices and high switching frequency PWM.</li> <li>e. PFC controlled rectifier with Active power factor Correction (APFC).</li> <li>f. Capability to operate in N+1 / N+X PRS -Parallel Redundant Configuration.</li> <li>g. Capability of independent or common battery bank operation of the UPS when operated in PRS.</li> </ul>
3	Model Name & Number	
3.1	40 kVA / 36 kW	Make / Model / Part No to be specified by the vendor
4	Input	
4.1	Input facility -Phases / Wires	3-Phase / 4-Wire & Gnd (R, Y, B -Phases & Neutral + Ground)



### NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES

(Institute of National Importance), Bengaluru- 560 029

राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का स्थान), बेंगलुरु -

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http://www.nimhans.ac.in/tender

560029.

E-mail aaos@nimhans.ac.in



4.2	Input Voltage Range	300 - 477 V AC ( <b>On Full Load</b> ) 208 - 477 V AC (On 70% Load)
4.3	Nominal Input Voltage	380 / 400 / 415V AC
4.4	Nominal Input Frequency	50 / 60 Hz (Auto selectable)
4.5	Input Frequency Range	45 to 55 Hz
4.6	Input Power Factor	> 0.99 on Full resistive load Load
4.7	Current Harmonic Distortion(THDi)	< 5 % on Full Load (with Mains THDu less than 1%)
4.8	Generator Compatibility	Compatibility to genset supply required
4.9	Input Protection (Thru built 3P MCCB	Input to Rectifier, Input to Bypass, Manual Bypass (In-built)
5	Output	
5.1	Nominal Output voltage	380 / 400 / 415V AC (Selectable)
5.2	Output Voltage Regulation	± 1 %
5.3	Nominal Output Frequency	50 / 60 Hz (Selectable)
5.4	Output Frequency Regulation	+/- 0.05 Hz (Free Running / Self Clocked Mode) + / - 5 % (Synchronized to Mains Mode, Selectable)
5.5	Output Frequency Slew Rate	<1Hz/sec
5.6	Output Wave Form	Pure sine wave
5.7	Output Voltage Distortion (THDu)	<= 3% (For 100% Linear / Resistive Load)
<i>F</i> 0	C	<= 5% (For 100% Non-Linear / RCD Load)
5.8	Crest Factor	3:1 On Full Load
5.9	Unbalanced load on phases	100% unbalanced load should be allowed





(Institute of National Importance), Bengaluru- 560 029

राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का स्थान), बेंगल्र –

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811  $Website \quad http://www.nimhans.ac.in/tender$ 

E-mail aaos@nimhans.ac.in



5.10	Voltage symmetry with 100% Unbalanced Load	+/- 1%
5.11	Displacement angle for 100% balanced Load	120 deg +/- 2 deg
5.12	Output Short circuit Protection	Thru In-built 3P MCCB
6	Transient Response / Recovery	
6.1	Transient Response: Dynamic Regulation for 10% to 90% step linear load	±7%
6.2	Transient Recovery to steady state condition after 10% to 90% step linear load	< 1 cycle
7	Transfer Time	
7.1	Transfer Time (Mode of operation)	Nil from Mains mode to Battery Mode Nil from Battery Mode to Mains mode
7.2	Transfer Time (Inverter to Bypass / Bypass to Inverter)	< 1 ms (Synchronized Mode) < 10 ms (Asynchronized Mode)
7.3	Automatic & Bi-directional static by-pass (In-built)	Should be provided to take care of uninterrupted transfer of load from Inverter to bypass (under overload / fault conditions) & automatic retransfer from bypass to inverter (on removal of overload / fault conditions)



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का स्थान), बेंगल्र- 560029.

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http://www.nimhans.ac.in/tender

E-mail aaos@nimhans.ac.in



8	Efficiency (At Nominal Voltage & Resistive Load up to kW rating of UPS)		
8.1	Overall Efficiency (AC to AC) - Online (Double Conversion)	>94 %	
8.2	Inverter Efficiency (DC to AC) - Battery Mode of operation	> 94% (On Full Load)	
8.3	Overall Efficiency (AC to AC) - ECO Mode (Bypass feeding the load under normal conditions)	>97%	
9	Overload		
9.1	Inverter Overload capacity (Mains Mode & Battery Mode)	125% for 10 minutes, 150% for 60 seconds	
10	Display Panel (In-build LC Display & LED )		
10.1	Measurements (On LCD)	Input: Voltage / Frequency, Bypass: Voltage / Frequency, Output: Voltage / frequency / Current Battery: Voltage / Capacity, Load: In kVA / kW / Percentage, Temperature: STS/Inverter/PFC	
10.2	Event Logging & Statistical Data (On LCD): UPS should capture and display up to 500 events	Events like: Over temperature / DC Bus Fail / Fan Fail / Fuse Fail / Overload / Short-circuit / Device Fail / Inverter Fail / Rectifier Fail / Bypass Fail, etc Statistical Data: No. of power failures / Transfers to Bypass / Total Running time, etc	



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का स्थान), बेंगल्र -

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

Phone 26995023/5913/5923/5024/5025/5780 Website http://www.nimhans.ac.in/tender

E-mail aaos@nimhans.ac.in Fax 080-26571563/26564830/2121/6811



560029.

10.3	User Programmable Parameters & Settings (On LCD)	l converter / Redundancy selection - Battery: Tyne / Banks / Chargers Current / Manual & Automatic - I
10.4	Indications (LED)	Mains Mode of Operation / Battery Mode of Operation / Bypass feeding the load / UPS Fault
11	Alarms	
11.1	Audible Alarms	Battery Low beep / DC Fault beep/ UPS Overload beep/ o/p short ckt fault beep/ Shutdown beep
12	Battery Backup / Battery Ban	k & Charger
12.1	Backup Required	30 mins(On full load)
12.2	Battery Bank Voltage	± 240 V DC or more
12.3	Battery Bank VAh (Vendor to include battery sizing calculations with tender)	40,000VAH or more
12.4	Batteries Type	SMF 2 years warranty Battrey, 12V Cells,
12.5	Battery Makes	EXIDE/ LEOCH /QUANTA
12.6	Number of Battery Banks	Up to 3
12.7	Minimum Charger Rating (Including internal / external)	15% of Battery Ah rating offered
12.8	Charger type / Charging	Constant Voltage Constant Current Solid state SMPS charger designed for at least 10% of Battery Ah offered Float Voltage: 2.25 VPC Boost Voltage: 2.32 VPC
12.9	Battery recharge time (After complete discharge) to 90% capacity	10-12 hours



560029.

राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का स्थान), बेंगलुरु -

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http://www.nimhans.ac.in/tender E-mail aaos@nimhans.ac.in



12.10	Battery Protection (Vendor to specify the rating)	Electronic switch (SCR) & Fuse
12.11	Battery Housing (Vendor to provide the GA drawings of the offered Battery Rack)	Should be compact and space saving MS steel open racks complete with interconnectors / Battery fuse box or isolator (in case of external protection)
12.12	Battery End Cell Voltage	1.75 V/cell
13	Interfaces	
13.1	Serial Communication Port	RS232: Should be provided as standard
	REPO (Remote Emergency Power Off)	Provided in-built in the UPS
13.3	Interface to NMS (Network Management System	SNMP Card for connecting the UPS to LAN thru Ethernet port & monitoring thru NMS
·		एवं सीच रेलाए



राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का स्थान), बेंगलुरु –

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http://www.nimhans.ac.in/tender E-mail aaos@nimhans.ac.in

560029.



14	Restart / Testing Capability	
14.1	Automatic Restart	UPS should start up automatically on mains resumption after battery low shutdown
14.2	Battery Self Test	Manual / Scheduled battery test to ensure healthiness of batteries. However in event of weak batteries, test should be aborted and fault reported to the user thru replace battery warning
15	Physical	
15.1	Operating Temperature	0 to 40 deg C
15.2	Storage Temperature	-20 to 40 deg C
15.3	Operating Humidity	0 to 90% RH (Non-condensing)
15.4	Operating Altitude	3000 m.a.s.l (meters above sea level)
15.5	Protection Class	IP - 20
15.6	Type of Cooling	Forced Air
15.7	Noise Level	< 72 dbA at I meter distance
15.8	Form Factor	Free Standing Floor Mounted UPS
15.9	Dimension (w x d x h) in mm	To be furnished by the vendor
15.10	Weight - in kg	To be furnished by the vendor
15.11	Reliability	MTBF greater than 100000 hours
15.12	Packaging Material / Vibration Withstand & Drop Test	Recyclable (No CFC)



### NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES

(Institute of National Importance), Bengaluru- 560 029

राष्ट्रीय मानसिक स्वास्थ्य और तंत्रिका विज्ञान संस्थान, (राष्ट्रीय महत्व का स्थान), बेंगलुरु -

ರಾಷ್ಟ್ರೀಯ ಮಾನಸಿಕ ಆರೋಗ್ಯ ಮತ್ತು ನರ ವಿಜ್ಞಾನ ಸಂಸ್ಥೆ, (ರಾಷ್ಟ್ರೀಯ ಪ್ರಾಮುಖ್ಯತಾ ಸಂಸ್ಥೆ), ಬೆಂಗಳೂರು - 560 029

Phone 26995023/5913/5923/5024/5025/5780 Fax 080-26571563/26564830/2121/6811 Website http://www.nimhans.ac.in/tender E-mail aaos@nimhans.ac.in

560029.



		a. Hardwired
	Connections - Rectifier Input /	
15.13	Output / Bypass Input /	
	Battery	
16	Certifications	
		QMS: As per ISO 9001: 2008
16.1	Manufacturer	EMS: As per ISO 14001: 2004
		OSHAS: As per ISO 18001: 2007
		Safety: As per EN62040-1-2
16.2		EMC: As per EN62040-2
		ESD: As per IEC61000-4-2 Level 4
	Product Safety Certifications	<b>RF:</b> As per IEC61000-4-3 Level 3
	(Mandatory)	FT/Burst: As per IEC61000-4-4 Level 4
	-	Surge: As per IEC61000-4-5 Level 4
		CE Declaration of Conformance
16.3	ROHS compliance	UPS should be ROHS compliance
17	Warranty	UPS 2 Years OEM Warranty, Battery 2 Years OEM Warranty