

**Global Tender Notification for the supply of Transcranial Electrical Stimulation device
(Electrophysiology System) at Centre for Neuroscience, Indian Institute of Science,
Bangalore**

Terms and Conditions

1. The quotations should be submitted in two bids i.e., Technical bid and Commercial bid to the address specified at the end of this tender.
2. The technical bid must include details of all technical specifications of the unit (detailed below) along with commercial terms and conditions masking only the price component. Bill of materials, brochures, technical datasheets, and any other document may be enclosed to help the evaluation of the technical bid. Please also include warranty terms and any other information on upgradation terms in the technical bid.
3. The commercial bid must include the price of the unit indicating break up of:
 - I. For goods:
 - i. Installation, commissioning and training charges, including any incidental expenses if any
 - ii. Agency commission charges, if any.
 - iii. Provide certificates for the country of origin of manufacturing for each line item.
 - II. Price of every line item in the commercial bid should be quoted along with the total quoted price for the unit to be operational (fixed and ready to use) in the lab or department.
4. Both the Technical and Commercial bid should be put in separate sealed envelopes and put together in another cover stating, **“Transcranial electrical stimulation device (Electrophysiology System)”**.
5. All components listed for the unit must come from a single vendor, and functional integration of all parts is necessary. The vendor should have a good track record of having previously supplied **Transcranial electrical stimulation devices** in India or abroad (please furnish details).
6. The quotations should include CIF, IISc Bangalore
7. The validity period of the quotation should be 90 days.
8. If the goods are found to be defective, they must be replaced or rectified at the cost of the supplier within 30 days from the date of receipt of written communication from us. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.
9. The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time to award without thereby incurring any liability of the affected bidder or bidders.
10. The technical proposal should contain a compliance table beside the technical specifications listed in the description section below.
11. The compliance table should include all the items in the same order. The first column should describe your compliance in a “Yes” or “No” response. If “No,” the second column should state the extent of the deviation. The “third” column should state the reasons for the deviation, if any. The fourth column can be used to compare your solution with that of your competitors or provide details as requested in the technical requirements table below.

12. Please submit the proposal by courier to the address specified at the end of this tender. The deadline for submission of proposals is the **20th of September 2023, by 5 pm.**

Technical Specifications for Transcranial Electrical Stimulation (Electrophysiology System)

1. Medical Grade 2 channel transcranial Electrical Stimulation (tES with a cathode and an anode) for precise targeting of cortical structures in the mediolateral and anterior posterior directions by means of a headband.
2. System should be ideally lightweight, compact and portable.
3. Should have 5 standard modes: DC (tDCS and tODCS) and non-DC (tPCS, tACS, tRNS)
4. Adjustable output current range: 2000 μ A DC \pm 1% (5000 μ A DC \pm 1% available upon request)
5. Maximum Output Voltage: 40V \pm 5%
6. Adjustable frequencies up to 200 Hz with minimum of 1 Hz resolution
7. Adjustable current duration up to 40 minutes
8. Should have removable rechargeable batteries for longer and easy operation.
9. Should be provided with an extra set of rechargeable batteries, so that it can be easily swapped when a battery set being used becomes used up.
10. Should have a low battery indicator
11. Should have advanced monitoring and control systems updating performance and feedback over 1000 times per second.
12. Stimulation output fidelity (signal-to-noise) should be maintained during the entire stimulation session even if electrode conditions change.
13. Interface should have an open panel design and program using buttons directly on the device with easy-to-use bright-lit displays.
14. Should have an automatic stimulation sham feature.
15. System should be clinically validated for non-invasive and targeted neuromodulation.
16. Should have a "Smartsan" feature to provide a continuous visual indication of electrode contact quality before and during stimulation. From pre-stimulation set-up, to during stimulation monitoring, to post-stimulation confirmation, the stimulator should provide an intuitive and clear indication of electrode contact quality throughout.
17. Should have a "True current" feature to clearly indicate the actual current supplied at the moment with a back-lit display to be monitored during stimulation ramp-up and to confirm target current intensity is achieved.
18. Should have a "PRE_STIM Tickle" feature to supply a very weak current prior to tES to help condition the skin before the start of actual delivery of current.
19. Should have a "Relax" feature to allow the clinician to use a simple sliding bar to transiently decrease the current from the pre-set value based on subject feedback when stimulation is initiated or during the course of stimulation without interrupting or aborting stimulation.
20. Should provide continuous monitoring of current flow conditions and can engage automatic ramp-down when an unusual performance is detected.

21. Should have an abort button to safely ramp down the current
22. Should be upgradeable to 4x1 HD system using the appropriate adapter.
23. Should be possible to place electrodes by using modeling software to show optimum placement to target specific brain regions or explore current delivery with specific electrode placement.
24. Should have the facility to start and stop stimulation via a TTL signal.
25. Should have been used in clinical trials and over 10 publications in peer-reviewed journals and must have at least 3 installations in reputed central govt Institutes in India.

Commercial Terms and Conditions

Commercial Terms and Conditions		
1.	Warranty	Minimum 2 year warranty period
2.	Payment Terms	The payment terms should be specified in the commercial proposal.
3.	Shipping	The quote should also specify cost that includes shipping costs and insurance till the site.
4.	Proprietary Certificate	A proprietary certificate indicating that the company is the sole manufacturer of the system
5.	Authorization Certificate	An authorization certificate is required for quotes submitted by local dealers on behalf of the vendor

Sincerely,



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