



Running Contract Details	
Equipment Name	Transcranial Magnetic Stimulator (TMS) with Neuronavigator
Running Contract Valid Till	25-08-2025
Tender Ref No	KMSCL/EP/T492/1657/2023
Tendered Quantity	5
Supplier Name	M/s Aerobe Private Limited
GST No	07AAACA9148A2Z0
Installation & Delivery Period	8 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
A-62 FIEE Complex Okhla Industrial Area Phase-2 New Delhi 110020	Contact Person	Priyanka Senapati
	Phone	011 46073966
	Mobile No	(+91) 8384095920
	Email	tenders.in@aerobe.com

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	<b>Transcranial Magnetic Stimulator (TMS) with Neuronavigator</b> <i>Model &amp; Make : MagPro R30 with Magoption/ MagvertureA/s</i>	7263940.11 Incl.GST :12%	535715.58	7799655.69
		<b>7263940.11</b>	<b>535715.58</b>	<b>7799655.69</b>

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
<b>Transcranial Magnetic Stimulator (TMS) with Neuronavigator</b>							
Labour	1,63,438.65	1,67,557.30	1,71,779.75	1,76,108.60	1,80,546.53	1,85,096.30	1,89,760.73
Comprehensive	1,63,438.65	1,67,557.30	1,71,779.75	1,76,108.60	1,80,546.53	1,85,096.30	1,89,760.73

**Other terms & conditions**

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender

document).

2. The supplier shall submit performance security amounting to 5.00% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

## **Technical Specification**

### **Equipment :Transcranial Magnetic Stimulator (TMS) with Neuronavigator**

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#### **I. Description of Function**

1. Transcranial magnetic stimulation (TMS) is a neurophysiologic technique to noninvasively induce a controlled current pulse in a pre specified cortical target both integrated digital storage and processing system

#### **II. Technical Specifications**

##### **A. Stimulator**

1. Repetition rate of the stimulator should be 50Hz or more
  2. Standard
- a. TMS theta burst continuous and intermittent CTBS &ITBS
- b. Paired pulse stimulation ( same coil used for Monophasic / Biphasic )
3. Pulse mode (Standard & dual/twin).
  4. Wave form type (Monophasic & Biphasic)
  5. Direction of current –(normal)
  6. Pulses per second (1–100 pps)
  7. Inter pulse interval (for burst mode) 1-100ms
  8. No of Pulses per trains (1,2,3,4.....1000,1100,1200.....2000)
  9. Train duration above 10
  10. Number of trains (upto500)
  11. Inter train interval (0.1,0.2,0.3,0.4 120s)
  12. Stimulus intensity 70% or more at 50 Hz
  13. Power input 230Vac, 50Hz according to IEC60601-1 safety standards

##### **B. Stimulator Coil**

1. Figure of 8 coil –70mm ( Centre to centre distance 70mm, Outside edge to outside edge should be less than 100mm)
2. Coil should have switch integrated with the handle
3. Cooling of coil: Cooling with air extractor /Dynamic liquid cooling /other equivalent cooling method to provide reuse of the coil within an interval of 30 minutes of the procedure
4. The coil should be ready for next use within 30 minutes of the previous protocols
5. Number of Stimulations before warm up(3000-5000pulses), frequency 20 Hz.

### **C. Subsystems.**

#### **1. EMG**

- a. 2 Channel EMG for TMS diagnostic studies like MEP. Standard high performance system with accessories. Software and integration to the stimulator.
- b. Surface electrodes for EMG-100sets of disposable electrodes
- c. Treatment Chair-EMG&STIMULATION compatible treatment chair with back support and arm support on castor. High quality.
- d. Caps and ruler should be included
- e. Coil mounting unit-pedestal type
- f. System trolley. High quality system trolley to mount the stimulator unit, cooler, EMG unit and lap-top. No. of shelves to accommodate all components.
- g. Laptop-Latest version of operating system, large RAM and storage memory. USB Port for pen drive and readers with all accessories and cases. Fully loaded software for all application in TMS (Therapeutic and diagnostic-provide software details.
  - i. Processor:
  - ii. 11<sup>th</sup> Gen Intel Core i5 Processor
  - iii. 8 GB RAM
  - iv. HardDrive:1 TB, SSD 512
  - v. Monitor 15.6 inch or more
  - vi. Operating System Windows Licensed version

#### **2. Neuronavigation System**

- a. TMS Navigator to run on Windows 10/11 both 32 bit and 64 bit versions with multicore processor.
- b. Memory: 4GB
- c. Graphics: NVIDIA Ge Force or Quadro ATI Radion or equivalent with 512+MB dedicated memory.
- d. MRI Data from DVD should be read and copied without delay. MRI format should include DICOM and other popular data formats
- e. Brain segmentation should be automatic and should be fast. It should have MRI guided navigation and import facility for PACS. It should be compatible and closely integrated with the supplied TMS machine and other widely used machines.
- f. The software used should offer 3D and 2D visualization of MRI data, automatic brain segmentation and automated placement of markers and targets. It should have memory of the previous coil placement for accurate placement of TMS coil on subsequent protocols
- g. Monitor 20 inch diagonal.
- h. Hard disk : SSD
- i. State of the art system to integrate well with the supplied TMS system.
- j. System should have multi modal proven Neuro imaging software (MRI `Compatible) with a simple easy to use application focused on user interface.
- k. Software should permit efficient neuronavigation work
  - l. Should have a powerful application and analysis option to interact with MR imaging system data
- m. Specify the type of position sensor optical infrared based or electromagnetic based
- n. Real time coil tracking should operate and provide accurate visualization of coil along all six dimensions with degrees of freedom
- o. Should be able to automatically select the coil recognition (Optional)
- p. Should be able to automatically record multiple pieces of information. For each TMS pulse, including position/orientation, time TMS device, TMS state parameters. (Optional)
- q. All modern diagnostic capabilities (specify details). Provide application notes with the quote
- r. Specify whether following diagnostic options are supplied.
  - i. MEP
  - ii. CSP

- iii. CMCT
- iv. MT
- v. Advanced paired pulse stimulation- ICI, LICI, ICF (Gabergiemech)
- vi. Therapeutic stimulation capability
  - a. Up to 50/100Hz (specify) and inter burst interval of 200ms
  - b. TBS (Theta burst stimulation )
  - c. With TBS and CTBS
  - d. Therapeutic modes comply with international safety protocols

**D.** Should have safety certificate from a competent authority CE issued by a notified body registered in European Commission / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid.

**Note:** If CDSCO (Central Drugs Standard Control Organization) certification is required for the import and marketing of the equipment, then the same shall be submitted along with the technical bid