



Notice Inviting e-Tender

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Procurement of Medical Equipment for establishing a Level one modern Sleep Laboratory at SNPH Campus of IPGME&R-SSKM Hospital
(Submission of Bid through *online*)

Bid Reference No.: WBMSCL/NIT-588/2023

Dated-03.10.2023

Amendment-I

Revised Specifications for Polysomnography System with Titration

Sl No	Technical Specification
A.	General Specifications:
➤	Polysomnography system should have 50 or more channels
➤	System must have continuous impedance monitored and reported for EEG, EMG and ECG during sleep study
➤	The system should be US FDA & CE (4 digit notified body) /BIS/ CDSO
➤	Should follow latest AASM guidelines 2018
B.	Technical Specifications:
1.	Hardware: Polysomnography system's single head box should have at least 50 input
➤	32 or more input should be EEG
➤	Dedicated EMG channels - 5
➤	Chin EMG - 3 channels
➤	Automatic Chin EMG referencing
➤	EOG - 2 channels
➤	ECG-1 channels or more (1 physical or more)
➤	Pressure transducer-Dedicated differential w/snore
➤	Flow (Thermal)-
➤	Snore reading by microphone-
➤	Body Position-1 channel
➤	Effort (chest & Abdominal)-ZRIP DuraBelt Integrated RIP driver
➤	Aux inputs/DC inputs-8
➤	Min Sampling rate 2000Hz/s
➤	Min storage rate: 500 Hz/s
➤	PSG lab should have Pulse transit time-(PTT)
➤	Electrode interface - Intuitive image
➤	Pulse oximetry should be connected to head box-
➤	Internal memory of base station should be equal to 60GB (optional)

SI No	Technical Specification
➤	Lab must be supplied with fully synchronized Audio & video recording
➤	Must be supplied with I R Source-1 no
➤	Capnography must be present
2.	Software Specifications:
➤	Should have software for both automated and manual analysis and scoring of recorded data.
➤	Real-time access to data while the study is in progress & bed side monitoring should be possible
➤	Should permit storage of uncompressed raw data for future review and re-analysis
➤	Should permit writing of data on storage media such as CD/DVD/USB for review on any computer
➤	On screen impedance check of values.
➤	Adjustable gain and notch filter.
➤	User definable montages
➤	Automated user configurable reports
➤	Signal resolution/bit: should be at least 16
➤	Should have capability to define a dynamic and time synchronized workspace
➤	Should have capability to check inter scorer reliability
➤	Should be upgradable to advance scoring.
➤	Must have License free software and free up-gradation of software during warranty period.
3.	Networking and Hardware:
➤	Should have networked Video Camera with IR source.
➤	Compatible with high end processing with LAN
➤	Computer: System should include 1 latest Pentium processor-based computer 16 GB RAM, 1024 GB hard disk memory with a 24 inch flat screen monitor and a colour laser printer. Should also include pre-loaded genuine Microsoft Windows 10 software with UPS with mouse. Should have Screen resolution from 800 x 600 to 1200 x 1600. Should be from a reputed company (Dell or HP or equivalent)
➤	Oximeter probe - Should be supplied - QTY 1
➤	Sensor ZRIP belt kit - Should be supplied - QTY 1
➤	Thermistor airflow sensor - Should be supplied - QTY 1
➤	Computer system must be covered under warranty.

Titration Device:

SI No	Technical Specification
1	Intended use for Non Invasive for adult and pediatric with OSA, Respiratory insufficiency, respiratory failures and overlap syndromes.
2	Should be used for patient weighing 10Kg or above
3	Technical Specification
a.	Ventilation Mode:- CPAP,S (Spontaneous), S/T (Spontaneous/time), PC (Pressure Control), T (Time), Assured volume with Auto EPAP
b.	IPAP : 4-40 cmH2O
c.	EPAP : 4-25 cm H2O
d.	Breath Rate :- 0 - 40bpm
e.	Ti : 0.5 sec to 3 sec
f.	Target Tidal volume :- 200 - 1500ml
g.	Rise time should be minimum 100 ms to 600 ms or more
h.	Leak Rate: 60 liters/minute
i.	Monitoring:-Pressure, Tidal Volume, Minute Ventilation, Respiratory Rate, Leak, I/E ratio. Should also have a pressure bar graph and patient trigger indication
4	Device should have the following;

SI No	Technical Specification
a.	Should Provide flow-based pressure relief at transition from exhalation to inhalation, transition from inhalation to exhalation and during exhalation.
b.	Triggering and Cycling:- Automatic trigger, sensitive and manual flow trigger.
c.	Device must have Flow-Trigger. Automatic triggering and cycling to ensure best patient to machine synchronization would be desirable
d.	Volume assure pressure support technology for assured tidal volume
e.	Should have automatic EPAP and automatic respiratory rate to overcome airway resistance
5	Alarms: Apnea, Low minute ventilation, Low Tidal Volume, High respiratory rate, Patient disconnection,
6	Must have US FDA & CE (4 digit notified body) /BIS/CDSCO

Additional Accessories:

- EEG Electrodes: 30 pieces additional (72 Inches)
- ECG Electrodes: 10 Pieces
- Oronasal Thermistor: 4 pieces
- ZRIP Durabelt (effort sensor): 2 (1 for thorax and 1 for abdomen)
- Nasal cannula (Multi): 50 pieces
- Sampling Line: 10 pieces (If applicable)
- Nasal Cannula adult: 60 pieces
- Reusable Mask-16 (nasal-5 medium ,3 large)
(Oronasal- 5 medium, 3 large)