



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA - 769008, ODISHA

NOTICE INVITING TENDER

Tender Notice No.: NITR/PW/ID/2018/05

Date: 20 / 02 / 2018

The National Institute of Technology, Rourkela invites bids from the eligible bidders for procurement of a '**Real-time biomechanics data acquisition, visualization and biomechanical analysis solution**' at NIT Rourkela.

Last date of Submission of Bid: **20.03.2018; 03:00 PM**

Opening date of Technical Bid: **21.03.2018; 03:00 PM**

Opening date of Financial Bid: **23.03.2018; 11:00 AM**

For Details:

http://nitrkl.ac.in/OldWebsite/Jobs_Tenders/9Equipment/Default.aspx

Contact: Prof. Md. Rajik Khan, HOD, ID; Ph: 0661-246-2853; Email: khanmr@nitrkl.ac.in

Bidding through: <https://eprocure.gov.in/eprocure/app>

sd/-
REGISTRAR



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA - 769008, ODISHA

(OPEN TENDER NOTICE NO.: NITR/PW/ID/2018/05 Date: 20.02.2018)

(PURCHASE OF 'REAL-TIME BIOMECHANICS DATA ACQUISITION, VISUALIZATION AND BIOMECHANICAL ANALYSIS SOLUTION' AT NIT ROURKELA, ODISHA)

Sl. No.	Description of Goods/Service	Quantity
1.	<p>Real-time biomechanics data acquisition, visualization and biomechanical analysis solution</p> <p><i>Specification:</i></p> <ul style="list-style-type: none">• Software for Acquisition, Visualization, and Biomechanical modeling and Analysis• Laptop with 16 GB RAM, Windows 10, 1080p HD Widescreen auto focus webcam with Luggable Case• Software plug-in for real-time data collection from Electromagnetic Kinematic 3D Motion Tracker sensors and Wireless EMG probes, digitally.• Software should provide the ability to collect real-time data from Electromagnetic Kinematic 3D Motion Tracker standalone or synchronously with other data sources.• Integration, testing and configuring of Electromagnetic Kinematic 3D Motion Tracker system and Wireless EMG probes synchronously.• Capability to upgrade the system to add other data sources such as Force Plates, VR Hardware like Haptics devices, HMD, Projectors, EEG System, Instrumented Treadmill in future by simply adding the hardware and required software plug-in to collect data synchronously.• Handheld Event Marker for use with Kinematic Tracker as "OK" button through setup dialog windows; event marker; recording trigger; and third-party synch pulse• Quick release cuffs to mount Kinematic sensors on body segments of participant.• Ready integration with 6DOF Electromagnetic 3D Motion Tracker for real-time as well as off-line modeling and analysis.• 16 Sensor Wireless EMG System consisting of wireless EMG probes and remote system unit with charging sockets for Sensors with real-time integration into Biomechanical Base System above as well as for standalone EMG data Acquisition and analysis on a separate PC.• Parallel Bar EMG Sensors Selectable Bandwidth Options: 10-850 Hz or 20-450 Hz, Selectable Dynamic Range Options: 11 mv or 22 mV• Both Analog and Digital Output options.• Typical operating range of 40 m• Hardware triggering options to synchronize with 3rd Party devices• Inter sensor delay- 0 ms in digital mode, fixed 48 ms in Analog mode.• Baseline Noise $\leq 2.5 \text{ uV (r.m.s., r.t.i.)} \leq 3.0 \text{ uV (r.m.s., r.t.i)}$• CMRR $\leq -80 \text{ dB}$• Power Consumption ($<$)0.130 W	1 unit

	<ul style="list-style-type: none"> • Effective Radiated Power 9 mW • RF Protocol Proprietary • Full-charge Operation Time (>)6 hours (typical) • Recharge Time 2.5 hours • Auto Shut-down timer 300 seconds • Temperature Range 5 – 40 degrees Celsius • Sensor Input Range 11 mV (r.t.i) 22 mV (r.t.i) • Stand Alone Real-Time EMG Acquisition and Analysis software with comprehensive set of capabilities including: <ul style="list-style-type: none"> (a) Real-time filters, support for multiple data acquisition cards, User-friendly interfaces for user-friendly experiment design, a library of Ready-to-use tasks and real-time signal quality assessment. (b) Live Signal Exploration for freezing data on the screen without Stopping data collection, and performs quick analysis of signal amplitude and frequency. (c) Integrated database to manage data with subjects, workflows, and data files in a relational database. Filtering and grouping features allows intelligent searching of data across experiments to build up data sets for comparative studies, or for tracking subject progress. (d) Should have scripting capability and a library of ready-to-use calculations for signal processing and calculations. (e) User-friendly graphical interface, quick view tools and batch processing capabilities make post-processing of EMG, biomechanical sensors signals simple and efficient. (f) Should allow seamless integration with video files and external data files via Import/Export features. It supports frame-by-frame video playback option for inspecting the EMG activity collected in synchronization with 3rd party video capturing system. • 3 Remote Analysis licenses • Onsite training session • 03 Year of Maintenance, Subscription, and Support program • Proprietary certificate need to be provided (if applicable) 	
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Quantity required : **as mentioned above**

(All information provided in technical specification)

Delivery : Within 60 days from the date of purchase order

Last Date of submission of Tender : 20.03.2018; 03:00 PM

Date of opening of Technical bid : 21.03.2018; 03:00 PM

Date of opening of financial bid : 23.03.2018; 11:00 AM

1. The firm should not have been black listed at any time.

2. The submission of following bids by the tenderer should be through

<https://eprocure.gov.in/eprocure/app>. Please follow the guidelines as per the portal.

(PURCHASE OF 'REAL-TIME BIOMECHANICS DATA ACQUISITION, VISUALIZATION AND BIOMECHANICAL ANALYSIS SOLUTION' AT NIT ROURKELA, ODISHA)

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Date: 20 / 02 / 2018)

Due on 20th March 2018; 03:00 PM

3. Liquidated damage clause will be charged for any delay in supply of goods.
4. The validity of the tender shall be **90 days** from the date of opening of the bids.
5. Detailed advertisement including all tender documents is also available in our website at http://nitrkl.ac.in/OldWebsite/Jobs_Tenders/9Equipment/Default.aspx
6. NIT reserves the right to qualify or deny prequalification of any or all applicants without assigning any reasons.

(REGISTRAR)
NIT, Rourkela
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