

CORRIGENDUM- 1

Tender Ref: OE/RAJEN/71/2022/MOTIONCAPTURE

Tender Name: Motion Capturing System (MCS) with accessories for tracking ship and offshore structure models in the IITM wave basin.

Reason for Corrigendum: Amendment in Technical Specification and Extension of Bid Submission Date.

EXTENSION OF BID SUBMISSION DATE:

The due date for the submission of bids has been extended to 30/01/2023 @ 3 PM. The bid opening is 31/01/2023 @ 3 PM.

Amendment in Technical Specification

Sl. No	Existing	Revised
4.	Resolution –The resolution of the device must be less than 0.02° in roll, pitch, and yaw axes.	Resolution –The resolution of the device must be less than or equal to 0.2/0.05/0.65 deg (Raw RMS noise) in roll, pitch, and yaw axes.
5.	<p>Accuracy - The device should have an accuracy of</p> <ul style="list-style-type: none"> • <1cm in terms of absolute error i.e. the error measured with reference to a global inertial frame in a 30m x 30m area for a ship maneuvering case. • <1mm in terms of relative error i.e. the error measured with reference to the dimensions of a calibrated object in a 30m x 30m area. • < 0.1° in yaw angle and < 0.1° in roll and pitch angular measurements. • <0.01 m/s accuracy in velocity measurements and <0.01°/s accuracy in angular rate measurements. • <0.01 m/s² accuracy in acceleration measurements • Sufficient latency should be guaranteed for real-time display on the viewer's display <p>Minimum sampling rate for output measurement should be in the range of 25- 200Hz</p>	<p>Accuracy - The device should have an accuracy of</p> <ul style="list-style-type: none"> • <1cm in terms of absolute error i.e. the error measured with reference to a global inertial frame in a 30m x 30m area for a ship maneuvering case. • <2mm in terms of relative error i.e. the error measured with reference to the dimensions (0.5m x 2m) of a calibrated object in a 30m x 30m area. • 0.3°/0.1°/1° in yaw/pitch/roll angular measurements. • <0.03 m/s accuracy in velocity measurements and Angular velocity (per axis, ZYX): < 1.3/0.6/4.5 deg/s (RMS noise level) accuracy in angular rate measurements. • < 1.3-2.7 m/s² (RMS noise level) accuracy in acceleration measurements • Sufficient latency should be guaranteed for real-time display on the viewer's display • Minimum sampling rate for output measurement should be in the range of 25- 200Hz
7.	Outputs of the device to be on RS- 232, RS-422, RS485, and Ethernet, and a maximum output rate of up to 200 Hz	Outputs of the device to be on RS-232 or RS-422 or RS485 or Ethernet, and a maximum output rate of up to 200 Hz
9.	The MCS should be waterproof and resilient against water splashing. It can be used in an ambient lighting environment and should not require any special lighting. The vendor software should be capable of masking any background light	The MCS should be resilient against water splashing. It can be used in an ambient lighting environment and should not require any special lighting. The vendor software should be capable of masking any background light

13.	Input voltage-The MCS should be AC powered.	Input voltage-The MCS should be AC/DC powered.
14.	Power consumption- device should consume less power. (Up to 5 watts)	Power consumption of the active markers should consume less power. (Up to 5 watts)
15.	Operational temperature range- The device should work well in the temperature range of -5° Celsius to 60° Celsius. It should also be capable of being in operation for long hours without any excessive heat generation.	Operational temperature range- The device should work well in the temperature range of -5° Celsius to 45° Celsius. It should also be capable of being in operation for long hours without any excessive heat generation.
20	The device should possess excellent vibration rejection characteristics.	To be deleted
23.	Warranty The vendor should provide a warranty of minimum 2 years. This should include the warranty cover for all hardware and software equipment and should include all the labor/shipping costs for repairs or replacements. Unlimited technical support should be provided during the lifetime of the system without additional costs. The local representative should be available within India and should be available within a week for any kind of troubleshooting that may come up during the installation/ operation of the MCS.	Warranty The vendor should provide a warranty of minimum 2 years. This should include the warranty cover for all hardware and software equipment and should include all the labor/shipping costs for repairs or replacements. Technical support should be provided for at least for 5 years of the system without additional costs. The local representative should be available within India and should be available within a week for any kind of troubleshooting that may come up during the installation/ operation of the MCS.