

Technical Specifications of “Sensor Based Positional and Motion Tracking System”**1.0 Bidder Eligibility Criteria:**

I	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content value	Reference, Page No.
I	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017PP (BE II) dated 16 th September 2020 and other subsequent orders issued therein.			
2.0	Bidder Eligibility Criteria-II	Complied/Not Complied	Reference Page No.	Remarks, If any
1	The supplier/vendor must be an original equipment manufacturer or an authorized agent/dealer/seller of the item. The vendor should have supplied at least 3 similar units at other IITs or NITs, or national laboratories and research centres (DRDO/CSIR/BARC/IGCAR), or R&D centres of reputed multinational companies, or globally recognized universities, in the last 5 years. PO copy, or performance certificate, along with contact details (for these organizations) needs to be submitted.			

3.0 Technical Compliance:**Equipment feature:**

Sl.No.	Specifications	Complied/Not Complied	Reference Page No.
1.	A total of 20 Inertial Measurement Units (IMU) sensors are required with following specifications		
Technical Specifications: Equipped with 9 Degrees of Freedom as follows -			
2.	3 –axis Gyroscope: Full range +-2000 deg/second of better		
3.	3-axis accelerometer: Full range +- 16g of better		
4.	3-axix magnetometer: Full Range +- 8 Gauss or better		
5.	The sensors should be compliant with IP68 ratings (Water and Dust)		
6.	Battery – Up to 8 hours or better in continuous usage		
7.	Bluetooth – 5.0 or above		
8.	The sensors should come with an SDK support for Windows 10 or higher.		
9.	Real-time streaming frequency should be 60Hz or better.		

10.	The data should be captured at 120 Hz or better.		
11.	The sensors are to be placed on Human Body, and hence should be lightweight (<15 grams each).		
12.	The set should also contain suitable sensor holders, straps (or sleeves) to tie on various body parts, suitable number of charging ports and cables for quick charging (Compliant to Indian power output 220v, 50-60 Hz.), and adhesive patches.		
13.	Warranty:	3 years onsite.	
14.		Optional Quote-1: Additional 2 years warranty may be quoted separately.	
15.		Optional Quote-2: AMC for 2 years after 3 Years Warranty period	
16.		(Optional quotes will not be taken up for price bid comparison)	
Other Terms and Conditions			
1.	The system should be delivered within 20-24 weeks from the opening of the letter of credit or issue of the purchase order, whichever is later.		
2.	Costs and related information should be given only in the financial bid.		
3.	The cost should include all delivery costs up to IIT Madras.		
4.	The warranty shall commence only from the date of equipment installation at IITM.		
5.	IIT Madras reserves the right to exclude some items from the purchase.		
6.	As part of tender technical evaluation, IIT Madras will approach the past end users for feedback and in case of any adverse feedback the bidder will be technically disqualified.		
7.	The system should be installed and commissioned with no additional cost.		
8.	Training at IIT Madras should be provided with no additional cost.		
9.	System manual should be provided in CD or pen drive form.		
10.	Services and spares should be readily available within India		

Technical Bid should comprise of the following		Complied/Not Complied	Reference Page No.
1.	Detailed Technical brochure		
2.	Detailed technical write up explaining how each of the Technical Specifications are complied with, indicating the location in the brochure		
3.	The vendor should guarantee round the clock technical support not only during the warranty period but even beyond through an annual maintenance contract. Demonstration of having provided such satisfactory technical support to customers shall be enclosed with the technical bid.		
4.	The manufacturer must have a well-qualified technical support team		

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the above points with document proof as required. Failing which bidders will be technically disqualified)