## <u>TECHNICAL BID PROFORMA</u> Item Name: Multi Zone Temperature Chamber

#### **1.0 Bidder Eligibility Criteria:**

Ι	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content value	Reference, Page No.
Ι	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16 <sup>th</sup> September 2020 and other subsequent orders issued therein.			
2.0	Bidder Eligibility Criteria-II	Compliance (Yes/No)	Reference Page No.	Remarks, If any
1	The bidder/OEM should have supplied at least 1 similar items to IITs, NITs, IISERs, CSIR Labs or other Govt. R&D organizations in the last 3 years, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation.			

## **3.0 Technical Compliance:**

# Multi Zone Temperature Chamber

S.No	Specification	Comply / Not comply	Reference Page No.
1.	8 independent chambers should be isolated and allow a unique temperature setpoint		
2.	Uniform temperature for all cells without hot/cold zones like oversized chambers suffer.		
3.	Cabling and connections between tester and cells with interface trays for all cell-types.		
4.	Large <b>LCD touchscreen</b> displaying temperature setpoint and measured temperature for each chamber		
5.	Start and stop tests on an individual cell without affecting others in the chamber		
6.	Controlling chamber using push button control for manual operation when used stand alone		
7.	Each chamber should be equipped with a pressure relief valve to provide protection in the case of gassing or thermal events		

8.	Built-in over temperature protection integrated with cycler to automatically stop tests on any cell that is out of tolerance. Maximum heat can be generated when the maximum cooling is 600 W.	
9.	Cabinet exterior dimensions could be in inches at around W12.5 x D16 x H22. Small variations are accepted.	
10.	Interior chamber dimensions in inches can be around W4.5x D6.5xH2.7, small variations are accepted.	
11.	This chamber should be for cells operating with $\leq 60A$	
12.	The temperature range is -10 to 120°C.	
13.	The battery tray type should host coin cell, cylindrical cell, pouch cell and universal clips and universal clips with reference electrodes	

## **Terms and conditions**

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1.	Soft and hard copy of the manual should be provided with the	
	instrument.	
2.	Test report of the instrument should be provided.	
3.	Installation should be free	
4.	Training session related to equipment and software related to the	
	system to be done atleast three times per year until warranty expire	
5.	Warranty: Minimum 3 years, Company must take responsibility to	
	replace the consumables if needed during the three years of warranty	
	Period.	
6.	Service facility and down-time call attendance:	
7.	Supplier should clearly mention about their service set up in India	
	(preferably in South part of India) for prompt service support along with	
	contact details of service engineers specially trained on the offered	
	system. Service should be provided within 24 hrs from the report of	
	technical problem so that machine down time is minimized.	
8.	In case the Equipment / System remains non-operational for more than 5	
	days then warranty period will be extended for the equivalent period for	
	which Equipment / System remained non-operational. Warranty	
	extension in such case shall be done without prejudice to any other Term	
	& condition of the contract.	
9.	Spares: Supplier should confirm the availability of spares for next	
	10 years from the date of installation. All essential spares for day-to-day	
	operation needs should be provided as standard supply.	
10.	Pre-Installation Requirement: Necessary pre-installation advice should be	
	sent immediately after the placement of the order.	
11.	Delivery Condition: The instrument should be delivered within 10-12	
	weeks.	