## TECHNICAL BID PROFORMA

Item Name: "Multi-channel real-time oscilloscope with spectrum analysis option(Unit-1)"

**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-45021/2/2017-PP (BE II) dated 16 <sup>th</sup> September 2020 and other subsequent orders issued therein.			
II	Bidder Eligibility Criteria-II	Compliance (Yes/No)	Reference Page No.	Remarks, If any
1	The bidder/OEM should have supplied at least 5 similar items to IITS, NITS IISERS, CSIR Labs or other Govt. R&D organizations in the last 5 years. Purchase order copies or installation certificates 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.			

## 2.0Technical Compliance:

S.no	Technical specifications		complied/ not complied	Reference pg no
1	Number of analog channels	8		
2	Bandwidth (-3 db)			
3	50 Ω	4GHz		
4	1 ΜΩ	500 MHz		
	Rise/fall time			
5	10/90%	< 80ps		
6	20/80%	< 60ps		
7	Sample rate, real-time	16 GSa/s, all analog channels		
8	Sample resolution	62.5 ps		
9	Vertical resolution	10 bits, up to 16 bits with high- resolution mode		
10	Real-time update rate	> 200,000 waveforms/sec		
11	Memory depth	200 Mpts/channel, all channels		
12	Time base accuracy	8ppb		
	Input impedance			
13	50 Ω	50 Ω ± 3.5% (typically ± 1% at 25 °C)		
14	1 ΜΩ	1 MΩ ± 1% (14 pF typical)		

	Input sensitivity		
15	50 Ω	1 mV/div to 1 V/div	
16	1 ΜΩ	1 mV/div to 5 V/div	
	Input coupling		
17	50 Ω	DC	
18	1 ΜΩ	DC, AC (> 11 Hz)	
19	Dynamic range	± 4 divisions from center screen	
20	Bandwidth limit filters	Analog and digital domain; Variable bandwidth	
	Input connectors		
21	Connectors	SMA adapters on all channels	
	Channel-channel isolation		
22	Adjacent Channels:	< -50dB	
23 Non-Adjacent Channels: < -65dB		< -65dB	
24	Real time spectrum analysis	Frequency: 0 Hz to 4 GHz with 40 MHz Span	
25	on all channels	FFT rate/sec: >24000	

(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)

SIGNATURE OF BIDDER ALONG WITH SEAL OF THE COMPANY WITH DATE