



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

Powai, Mumbai 400076.

Reference No. (PR No. 1000020916)

RFx No. 6100000780

TECHNICAL SPECIFICATIONS

Arbitrary Waveform Generator (AWG)

Technical specification of the Arbitrary Waveform Generator. All the specifications assume a 50 Ohm load, and port impedance, unless explicitly stated.

S. No.	Technical Specification	Value
1.	Sampling Rate	At least 2.4 GSPS
2.	Number of Analog Channels	4 (four)
3.	Trigger Input	1 per channel
4.	Analog Bandwidth	At least 750 MHz
5.	Record Length	At least 64 M Samples per channel
6.	DAC Resolution	16-bit
7.	Coupling of channels	AC and DC, switchable
8.	Marker outputs per Analog Channel	At least 1 Marker output per channel
9.	Amplitude Range (50 Ohm load)	1.5 V Peak-to-peak or more
10.	Amplitude Resolution	0.1 mV
11.	Amplitude Accuracy	$\pm 2\%$ of setting ≥ 100 mV p-p
12.	Rise/Fall time	< 500 ps for 0.2 V step
13.	Amplitude Offset Range	± 750 mV or more
14.	SFDR (10 MHz – 500 MHz)	-80 dBc or better
15.	Worst Harmonics	-57 dBc or better (within the amplitude specification listed above)
16.	Marker Jitter	60 ps or better
17.	Run Modes	Continuous, Triggered, Gated
18.	Sampling Clock resolution	At least 7 digits
19.	Trigger to Output delay	3.6 micro-second
20.	Output Skew Control Range	200 ps
21.	Output Skew resolutions	25ps
22.	10 MHz reference	SMA, 50 Ohm
23.	Ability to synchronise multiple units	Yes (include the maximum number of channels that can be synchronised in the technical document)



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Additional requirements from the prospective supplier

- The supplier should provide Authorization Certificate from the OEM for the Quoted Brand of the equipment.
- The supplier should state categorically whether they have fully trained technical staff for installation of the equipment.
- The supplier should have a minimum 03 (three) years of experience in supplying and successfully installing equipment of similar specifications and should provide references (installation sites) from premier Institutes in India or abroad (preferably Government Organizations in India). Provide the list along-with contact details of the users.
- At the time of commissioning the successful bidder has to arrange for the installation, demonstration/ training the complete functioning of the equipment without any extra charges.
- After-sales service support for repair/ replacement of non-functional parts should be available in India (including all services under warranty).
- **Warranty:** 12 months form the date of commissioning