Reference No. (PR No. 1000020307)   **RFx No. 6100000835**

TECHNICAL SPECIFICATIONS

Multi-Channel high-precision and low-noise voltage source with low-current sensing capability

Sr.No	Parameters	Specification
1	Channels	Shall have between 15 and 24 independent channels in a single integrated compact instrument.
2	Connection	Connection to each channel shall be made through BNC connectors
3	DC voltage range	-10 V or lower to + 10 V or higher
4	DC voltage resolution	$20\ \mu V$ or finer
5	DC Voltage stability	$\pm 2\ \mu V$ or lower drift over 8 hours or more
6	Noise	$100\ nV/\sqrt{Hz}$ or lower, within the 10 Hz to 10 kHz range (excluding 50 Hz or 60 Hz noise). Noise data from at least 2 channels of the multi-channel instrument must be provided by the manufacturer
7	Temperature stability	$\pm 3\ \mu V/°C$ or lower at 25 °C. Temperature stability data from at least one channel should be provided by the manufacturer.
8	Settling time	1 ms or lower. This settling time must be achievable without compromising the noise specifications. Settling time data for at least one channel should be provided by the manufacturer
9	Sync output	The instrument should have at least one sync output, so that other instruments can be synchronized to voltage sweeps
10	Waveform output	Each channel shall be capable of providing sine, triangular, square and ramp waveforms for frequency of 1 kHz or higher. All channels need not be capable of being swept simultaneously.
11	Current Sensing	- Each channel should be capable of sensing currents up to 100 µA - Current sensing resolution should be 20 bits or higher.

12	Interfacing with a computer	- Remote programming of each channel from a computer, via a single communication channel, which can be GPIB, USB, or ethernet should be provided - The computer control interface must be galvanically isolated from the voltage generation module - A python-based software driver must be provided for remote programming.
13	Warranty	The instrument should have a minimum warranty of 1 year