

INDIAN INSTITUTE OF TECHNOLOGY GOA
Goa College of Engineering Campus, Farmagudi, Ponda -403401, Goa

Enquiry No. IITGOA/2018-19/070

Date: 31/01/2019

**Corrigendum to the Tender for supply of Semiconductor Parametric Analyser vide
Enquiry No. IITGOA/2018-19/070 dtd. 31/01/2019.**

For the tender for supply of Semiconductor Parametric Analyser at IIT Goa, the following clauses / paragraphs have been modified:

1) Amended Specifications:

Parameter	Tender Specification	Amended specifications
Semiconductor parametric analyzer Unit	Main instrument should have at least 10 slots and should allow upgrading with more SMUs if empty slots are available. Must have inbuilt touch screen display Must include necessary number of 3m cables for connections. Must be upgradable to 10kV and 1500A in future using the same Chassis.	1) Main instrument should have at least 9 slots or more and should allow upgrading with more SMUs if empty slots are available. 2) Preferable to have upgrade facility of 10kV and 1500A in future.
Ground Unit	A separate ground unit should be available with at least 4A sink current apart from the independent of the 10 slots	A separate ground unit should be available with at least 4A sink current apart from the independent of the 9 slots
Atleast four terminals with the below specifications		System should have total 4 numbers of source and measure unit as below: 2 number of medium power SMU and 2 numbers of High power SMU
Maximum voltage range and resolution		100 V with measure resolution of 100 μ V with at least a) 10mA @ 100V (for MPSMU) and b) 100mA @100V (For HPSMU)
Minimum current range and resolution	1nA with measure resolution of 10fA	a) 1 pA with measure resolution of 100 aA (for MPSMU) and b) 100 nA with measure resolution of 100 fA (For HPSMU) or better
Pulse width range for pulsed	500us to 2 s	1mS to 2S

measurement		
Resolution	1mHz	1KHz
Signal output level range	10 mVrms to 250 mVrms	10 mV rms to 100 mV rms
Capacitance measurement accuracy at the instrument port at 30mVrms test signal level and $Dx \leq 1$	1nF @1kHz <±0.2 % 100pF @ 1kHz <±1 % 1nF @10kHz <±0.15 % 100pF @ 10kHz <±0.2 % 1pF @ 1MHz <±0.2 %	1nF @1kHz <±0.7 % 100pF @ 1kHz <±1.6 % 100pF @ 10kHz <±0.4 % 1nF @10kHz <±0.15 % 1pF @ 1MHz <±0.2 %
Pulse measure/high voltage semiconductor pulse generator unit(HV-SPGU) (optional)	Pulse capability •No. of channels: 2 per module, Modes: pulse, constant, and free run •Output voltage (Vout) 50 Ω load – 20 V to +20 V, Open load –40 V to +40 V The unit should be able to measure the impedance of DUT and adjust the output voltage according to the DUT impedance. •Pulse period range: 20 ns to 10 s •Pulse width programmable range: 10 ns to (period – 10 ns) •Voltage monitor minimum sampling period (also for Pulsed IV): 5us •Programmable parameters: Pulse width, period, Transition time. •Complex waveform generation using arbitrary linear waveform generation should be possible •Peak short circuit current: 800mA •Output Connector: SMA	System should have pulse sourcing and measurement capability with below timing specifications. <ul style="list-style-type: none"> • Pulse period range: 140 ns to 2 s • Pulse width programmable range: 70 ns to 1S • Voltage /current monitor minimum sampling period (also for Pulsed IV): 5µs or better

2) The last day for submission of bids has been extended to 11/02/2019 till 17:00 Hrs.

All other terms will remain same.

Sd/-
Assistant Registrar