

CORRIGENDUM

1. Clarifications for IITPKD/ELE/SS/055/2017, Date: 13.11.2017

Regarding Virtual Instruments / PXI based instruments :

- (a) Virtual Instruments OR PXI based instruments are **NOT ACCEPTABLE** for Part A : Vector Network Analyzer, Part B : Signal Analyzer and Part D : Vector Signal Generator.
- (b) For Part C : Microwave Power sensor – Both USB/ethernet based microwave power sensor along with accessories OR stand-alone power meter are allowed provided they meet the required technical specifications. In case of USB based power sensor, required software for acquiring and visualizing data on Windows 10 PC must be provided (with perpetual license).

2. Changes for IITPKD/ELE/SS/055/2017, Date: 13.11.2017

(a) Page 3, SCHEDULE, Point 4

~~The bidder may quote for one or more parts (Part A, Part B, Part C, Part D) mentioned above. Financial bid for each part must enclose in separate envelope. For each part mentioned above, the evaluation will be done for that respective part and purchase order will be given to the technically qualified bidder, who quotes the lowest price for the respective part. For each of the parts the technical evaluation will be done based on the mandatory requirements.~~

Must read as :

The bidder may quote for one or more parts (Part A, Part B, Part C, Part D) mentioned on page 6. Technical and Financial bid for each part must be enclosed in separate envelopes. EMD for each part should be enclosed in the respective financial bid. All the financial and technical bids must be put in one big envelope and delivered to the purchase section. The evaluation will be done for each part separately and purchase order will be given to the technically qualified bidder, who quotes the lowest price for the respective part. For each of the parts the technical evaluation will be done based on the mandatory requirements for that part mentioned in the specifications.

IMPORTANT : Enclosing EMD or mentioning value of EMD in technical bid will lead to immediate disqualification.

(b) First paragraph on Page 6 after first table :

~~The bidder may quote for one or more parts (Part A, Part B, Part C, Part D) mentioned above. For each part mentioned above, the evaluation will be done for that respective part and purchase order will be given to the technically qualified bidder, who quotes the lowest price for the respective part. For each of the parts the technical evaluation will be done based on the mandatory requirements.~~

Must read as :

The bidder may quote for one or more parts (Part A, Part B, Part C, Part D) mentioned on page 6. Technical and Financial bid for each part must be enclosed in separate envelopes. EMD for each part should be enclosed in the respective financial bid. All the financial and technical bids must be put in one big envelope and delivered to the purchase section. The evaluation will be done for each part separately and purchase order will be given to the technically qualified bidder, who quotes the lowest price for the respective part. For each of the parts the technical evaluation will be done based on the mandatory requirements for that part mentioned in the specifications.

IMPORTANT : Enclosing EMD or mentioning value of EMD in technical bid will lead to immediate disqualification.

(c) Page 6 and Page 7 : Vector Network Analyzer (Bench Top Model)

Sl. No.	Feature	Specifications
24	Cables and adapters	3 sets of male to female N-type adapters 4 VNA grade cables 4 50 ohm matched termination

Must read as

S. No.	Feature	Specifications
24	Cables and adapters	i) Three nos. of male to female adapters for the type of connector on the VNA ports ii) Four nos. of VNA grade cables iii) Four nos. of 50 ohm matched terminations

All other specifications for Vector Network Analyzer remain unchanged.

(d) Page 8 and Page 9 : Signal Analyzer (Bench Top Model)

Sl. No.	Feature	Specifications
5	Residual FM	≤ 10 Hz
14	Maximum attenuation	≥ 70 dB

Must read as

S. No.	Feature	Specifications
5	Residual FM	This clause is now deleted.
14	Maximum attenuation	≥ 70 dB (of which atleast 60 dB internal). External attenuator, if required, must also be provided.
32	AC Power supply Rating	230V\pm10%, 50Hz

All other specifications for Signal Analyzer remain unchanged.

(e) Page 9 : Microwave Power Sensor

S. No.	Parameters	Specifications
2	Power range	-35 dBm to +20 dBm
3	Damage level	AC coupled 25 dBm (average power), 50 V (DC) 15 W (2 μ s duration) (peak power) DC coupled 25 dBm (average power), 4 V (DC) 15 W (2 μ s duration) (peak power)

Must read as

S. No.	Parameters	Specifications
2	Power range	-55 dBm (or lower) to +20 dBm (or more)
3	Damage level	AC coupled ≥ 20 dBm (average power), 50 V (DC) ≥ 10 W (1 μs duration) (peak power) DC coupled ≥ 20 dBm (average power), 4 V (DC) ≥ 10 W (1 μs duration) (peak power)

Other specifications for Microwave Power Sensor remain unchanged.

(f) Page 10 : Vector Signal Generator

S. No.	Parameters	Specifications
11	Residual FM	<2 Hz rms (300 Hz to 3 kHz bandwidth)
17	Low Frequency Generation Range (BNC output)	DC to 60 MHz
23	Modulation Bandwidth	Internal : 5 MHz or more With External I & Q: 400 MHz
25	Supported Modulation	2ASK, 4ASK, 8ASK, 16ASK, BFSK, 4FSK, 8FSK, 16FSK, BPSK, QPSK, 8PSK, 16PSK, 4QAM, 16QAM, 32QAM, 64QAM, 256QAM, OQPSK, DQPSK, $\pi/4$ DQPSK, $3\pi/8$ PSK

Must read as

S. No.	Parameters	Specifications
11	Residual FM	This clause is now deleted.
17	Low Frequency Generation Range	DC to 60 MHz Note : Output can be available on either the BNC port or on the RF port.
23	Modulation Bandwidth	i) Internal : 5 MHz or more ii)With External I & Q: 400 MHz (or more) No external generator is needed but the interface to provide signal must be included.
25	Supported Modulation	2ASK, 4ASK, 8ASK, 16ASK, BFSK, 4FSK, 8FSK, 16FSK, BPSK, QPSK, 8PSK, 16PSK, 4QAM, 16QAM, 32QAM, 64QAM, 256QAM, OQPSK, DQPSK, $\pi/4$ DQPSK, $3\pi/8$ PSK (additional digital and analog modulation schemes can also be included)
43	Optional Oscillator Price and duties/taxes must be quoted as a separate item	Oven-controlled crystal oscillator

Other specifications for Vector Signal Generator remain unchanged.