

## Vendor Compliance Sheet

**(The Vendor is requested to provide the quantitative values of the asked parameters rather than writing OK/Comply/Yes etc.)**

Sr.No.	Parameter	Specification	Vendor Compliance
1.	Transmitter Frequency (GHz)	90	
2.	Transmitter Power (dBm)	+15	
3.	Receiver Frequency (GHz)	$90 \pm \delta$	
	$\delta$ (Any fixed frequency within, MHz)	100 to 600	
4.	Phi (deg)	0 to 180 ° or better	
5.	Antenna gain (dB)	23 or better	
6.	Low noise amplifier gain (dB)	$\geq 20$	
7.	Low noise amplifier Noise figure (dB)	6 or better	
8.	Continuous Variable attenuation / Gain control (dB)	$\geq 30$	
9.	Band pass filter centre frequency (MHz)	600	
10.	Output signal (I/Q)	1 Vpp @ 50ohm	
11.	IQ Frequency (Any fixed frequency within )	$>100$ KHz	
12.	Output Connectors at the IQ detector	SMA (F) / BNC	
13.	Delivery Period	Within 8 months	
14.	Warranty/Guaranty	1 year (min)	
15.	<b>Mandatory Spares</b>	1 MIXER -2 * (Qty : 02 No's) 2 IF LNA * (Qty : 01 No's)  *Ref. to circuit Layout attached.	3
16.	<b>Standard Accessories</b>	Vendor should quote for all the accessories i.e., microwave/RF components, inter-connecting waveguides and cables required for system operation, testing and maintenance.	
17.	Enclosure	The complete system should be enclosed in a 19" rack mountable metal enclosure with	

		provision for connecting a grounding cable so as to avoid interference to the system from external noise sources.	
18.	Indicators	The instrument subsystem (its assemblies) should be self-contained and incorporate indicators or status output signals	
19.	<p><b><u>POWER SUPPLIES</u></b></p> <ul style="list-style-type: none"> <li>The complete subsystem must operate on 230 V AC.</li> <li>No other power supplies must be required to operate the subsystem i.e. All the necessary DC power supplies required for the operation of all the active components of the system like Oscillators, Amplifier, LNAs, Multipliers, Quartz oscillators etc. must be included.</li> </ul>		
20.	<p><b><u>DOCUMENTS REQUIRED</u></b> along with the sub system:</p> <ul style="list-style-type: none"> <li>Complete specifications of ALL the components along with all the original datasheets and test reports should be provided.</li> </ul> <p>All components means including but not limited to Oscillators, Crystal oscillator, amplifiers, multipliers, attenuators, balanced mixer, SSB mixer, IQ mixer, LNAs etc.</p> <ul style="list-style-type: none"> <li>Operation / Service manuals must be provided.</li> </ul>		
21.	<b>Schedule</b>	<ol style="list-style-type: none"> <li>Vendor should submit the design/drawing details within 1 month from PO received.</li> <li>IPR will give the comments/acceptance of the drawing within 15 days after receiving it from the vendor.</li> <li>After the acceptance of drawing from IPR, vendor can start the fabrication.</li> </ol> <ul style="list-style-type: none"> <li><b>The delivery of the system</b></li> </ul>	

		<b>should be within 8 months from the date of approval of drawing.</b>	
22.	<b>Pre-despatch tests (before despatch for approval)</b>	<ul style="list-style-type: none"> <li>The vendor has to submit the following test reports to IPR once they complete the work of system assembly, integration and characterization.</li> <li><b>Based on these test reports, IPR shall issue a dispatch clearance letter.</b></li> </ul> <p>The report has to have the following tests</p>	
<b>Sr. No.</b>	<b>Parameter</b>	<b>Specification</b>	
1	System Output Frequencies a) Source 1 b) Source 2 c) $\delta$ (Any fixed frequency within)	90 GHz $90 \pm \delta$ GHz 100 to 600 MHz	
2	System Output Power a) Source 1 b) Source 2	+ 15 dBm + 15 dBm	
23.	<b>Acceptance tests at IPR.</b>	IPR representative shall perform the following measurements to verify the specifications as mentioned below:	
<b>Sr. No.</b>	<b>Parameter</b>	<b>Specification</b>	
1	System Output Frequencies d) Source 1 e) Source 2 f) $\delta$ (Any fixed frequency within)	90 GHz $90 \pm \delta$ GHz 100 to 600 MHz	
2	System Output Power c) Source 1 d) Source 2	+ 15 dBm + 15 dBm	
	<ul style="list-style-type: none"> <li>System shall be accepted only after above mentioned specifications are met.</li> </ul>		
24	<b>Warranty</b>	Minimum <u>one year</u> from the date of acceptance.	
25	<b>Packing Instruction:</b>	Proper packing should be done for the shifting of instrument from vendor/factory site to IPR.	

