



TENDER DOCUMENTS FOR

*“Supply, Installation,
Commissioning, Training &
Acceptance of RF amplifiers”*

**TENDER NO.
08/GARC/2022/EMC/370**

Form d2) Detailed Technical Specifications

Supply, Installation, Commissioning, Training & Acceptance of RF amplifiers

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1.1. RF amplifiers functional requirements

a. RF amplifier 1 (10kHz - 200MHz):

Dimensions and main characteristics.

The characteristics listed below shall be considered minimum requirements apart from any other characteristic required for the compliance with the standards and/or feasibility to perform the tests in the described manner.

This equipment is intended to be used for more than one test.

Sr. No.	Parameter	Requirement
1.1	Frequency	Please Fill
1.2	Amplifier Type	Please Fill
1.3	Output Power	Please Fill
1.4	Output power @ 1dB compression	Please Fill
1.5	Gain	Please Fill
1.6	Gain Flatness	Please Fill
1.7	Gain Adjustment	Please Fill
1.8	Input VSWR	Please Fill
1.9	Safe RF input level without damage	Please Fill
1.10	Mismatch Tolerance	Please Fill
1.11	Harmonic Distortion	Please Fill
1.12	Modulation capability	Please Fill
1.13	Connectors on Rear panel	Please Fill
1.14	Direction coupler	Please Fill
1.15	Direction coupler connector	Please Fill
1.16	Accessory	Please Fill
1.17	Remote interfaces	Please Fill
1.18	Cooling	Please Fill
1.19	Input and Output Impedance	Please Fill
1.20	Mains Input Supply	Please Fill
1.21	Service support - 1	Please Fill
1.22	Service support - 2	Please Fill
1.23	Service support - 3	Please Fill

1.24	Comprehensive Warranty	Please Fill
1.25	Comprehensive annual maintenance contract	Please Fill
1.26	Calibration	Please Fill
1.27	Quantity	Please Fill
1.28	Immunity Antenna	Not Applicable
1.29	Frequency	
1.30	Input power handling	
1.31	Gain	
1.32	Maximum VSWR	
1.33	3dB Antenna Beamwidth	
1.34	Connector	
1.35	Tripod	
1.36	Calibration	
1.37	Quantity	
1.38	Pre Delivery Inspection (PDI)	Please Fill
1.39	Final Acceptance & Commissioning (FAC)	Please Fill
1.40	Customer references	Please Fill
Documentation:		
1.41	One set of Operation Manual complete with drawings, parts list (with part codes), diagrams with list ratings of components and list of do's and don'ts for the main equipment as well as the sub-systems.	
1.42	These manuals should be in the form of hard (printed) copy in English Language as well as in electronic storage form (pen drive).	
General :		
1.43	Installation, training and trails to demonstrate proper functioning of the system will be the responsibility of the supplier.	
1.44	Preference shall be given to the supplier who have their local service agents in India	

b. RF amplifier 2 (80MHz – 1GHz):

Dimensions and main characteristics.

The characteristics listed below shall be considered minimum requirements apart from any other characteristic required for the compliance with the standards and/or feasibility to perform the tests in the described manner.

This equipment is intended to be used for more than one test.

Sr. No.	Parameter	Requirement
2.1	Frequency	Please Fill
2.2	Amplifier Type	Please Fill
2.3	Output Power	Please Fill
2.4	Output power @ 1dB compression	Please Fill
2.5	Gain	Please Fill
2.6	Gain Flatness	Please Fill
2.7	Gain Adjustment	Please Fill
2.8	Input VSWR	Please Fill
2.9	Safe RF input level without damage	Please Fill
2.10	Mismatch Tolerance	Please Fill
2.11	Harmonic Distortion	Please Fill
2.12	Modulation capability	Please Fill
2.13	Connectors on Rear panel	Please Fill
2.14	Direction coupler	Please Fill
2.15	Direction coupler connector	Please Fill
2.16	Accessory	Please Fill
2.17	Remote interfaces	Please Fill
2.18	Cooling	Please Fill
2.19	Input and Output Impedance	Please Fill
2.20	Mains Input Supply	Please Fill
2.21	Service support - 1	Please Fill
2.22	Service support - 2	Please Fill
2.23	Service support - 3	Please Fill
2.24	Comprehensive Warranty	Please Fill
2.25	Comprehensive annual maintenance contract	Please Fill

2.26	Calibration	Please Fill
2.27	Quantity	Please Fill
2.28	Immunity Antenna	Please Fill
2.29	Frequency	Please Fill
2.30	Input power handling	Please Fill
2.31	Gain	Please Fill
2.32	Maximum VSWR	Please Fill
2.33	3dB Antenna Beamwidth	Please Fill
2.34	Connector	Please Fill
2.35	Tripod	Please Fill
2.36	Calibration	Please Fill
2.37	Quantity	Please Fill
2.38	Pre Delivery Inspection (PDI)	Please Fill
2.39	Final Acceptance & Commissioning (FAC)	Please Fill
2.40	Customer references	Please Fill
Documentation:		
2.41	One set of Operation Manual complete with drawings, parts list (with part codes), diagrams with list ratings of components and list of do's and don'ts for the main equipment as well as the sub-systems.	
2.42	These manuals should be in the form of hard (printed) copy in English Language as well as in electronic storage form (pen drive).	
General :		
2.43	Installation, training and trails to demonstrate proper functioning of the system will be the responsibility of the supplier.	
2.44	Preference shall be given to the supplier who have their local service agents in India	

c. RF amplifier 3 (1GHz - 6GHz):

Dimensions and main characteristics.

The characteristics listed below shall be considered minimum requirements apart from any other characteristic required for the compliance with the standards and/or feasibility to perform the tests in the described manner.

This equipment is intended to be used for more than one test.

Sr. No.	Parameter	Requirement
3.1	Frequency	Please Fill
3.2	Amplifier Type	Please Fill
3.3	Output Power	Please Fill
3.4	Output power @ 1dB compression	Please Fill
3.5	Gain	Please Fill
3.6	Gain Flatness	Please Fill
3.7	Gain Adjustment	Please Fill
3.8	Input VSWR	Please Fill
3.9	Safe RF input level without damage	Please Fill
3.10	Mismatch Tolerance	Please Fill
3.11	Harmonic Distortion	Please Fill
3.12	Modulation capability	Please Fill
3.13	Connectors on Rear panel	Please Fill
3.14	Direction coupler	Please Fill
3.15	Direction coupler connector	Please Fill
3.16	Accessory	Please Fill
3.17	Remote interfaces	Please Fill
3.18	Cooling	Please Fill
3.19	Input and Output Impedance	Please Fill
3.20	Mains Input Supply	Please Fill
3.21	Service support - 1	Please Fill
3.22	Service support - 2	Please Fill
3.23	Service support - 3	Please Fill
3.24	Warranty	Please Fill
3.25	Extended warranty	Please Fill

3.26	Calibration	Please Fill
3.27	Quantity	Please Fill
3.28	Immunity Horn Antenna	Please Fill
3.29	Frequency	Please Fill
3.30	Input power handling	Please Fill
3.31	Gain	Please Fill
3.32	Maximum VSWR	Please Fill
3.33	3dB Antenna Beamwidth	Please Fill
3.34	Connector	Please Fill
3.35	Tripod	Please Fill
3.36	Calibration	Please Fill
3.37	Quantity	Please Fill
3.38	Pre Delivery Inspection (PDI)	Please Fill
3.39	Final Acceptance & Commissioning (FAC)	Please Fill
3.40	Customer references	Please Fill
Documentation:		
3.41	One set of Operation Manual complete with drawings, parts list (with part codes), diagrams with list ratings of components and list of do's and don'ts for the main equipment as well as the sub-systems.	
3.42	These manuals should be in the form of hard (printed) copy in English Language as well as in electronic storage form (pen drive).	
General :		
3.43	Installation, training and trails to demonstrate proper functioning of the system will be the responsibility of the supplier.	
3.44	Preference shall be given to the supplier who have their local service agents in India	

2. Acceptance Test Reports

[Please fill and include statement of the Report corresponding to exactly the same equipment as proposed, together with the contact details from the corresponding customer]

3. Calibration Test Reports

[Please fill and include statement of the Report corresponding to exactly the same equipment as proposed, together with the contact details from the corresponding customer]