

TECHNICAL SPECIFICATION - VHF REPEATER STATION WITH TOWER

1.	Equipment	:	VHF Repeater Station Complete with necessary feeder cables and other essential accessories.
2.	Purpose	:	To increase the coverage of Base/Station/Mobile Radio and Walkie Talkie sets.
3.	Model/Make/Brand	:	To be mentioned.
4.	Country of Origin and Manufacturer	:	Japan/Germany/USA/UK/South Africa/South Korea/Australia/Canada/EU Countries (To be mentioned).
5.	Name and Address of Manufacture	:	To be mentioned.
6.	Year of Manufacture	:	2017 or later.
7.	Quantity	:	05 (Five) in number complete sets.
8.	<u>Specification</u>		
	a.		
	(1) Frequency Range	:	146-174 MHz (or wider) microprocessor Controlled/Synthesized.
	(2) Frequency Stability	:	Better than ± 1.5 PPM.
	(3) Channel Capacity	:	Multi-Channel, 1 channel with duplexer.
	(4) Channel Spacing	:	25 KHz
	(5) Receiving Sensitivity	:	0.35 μ v or lesser at 12 db SINAD (Better).
	(6) Audio distortion	:	Less than 3%
	(7) Antenna	:	6 db gains omni directional (type of antenna and Origin to be mentioned).
	(8) Antenna Impedance	:	50 Ohm.
	(9) Minimum Power Output	:	100 watt.
	(10) Display	:	Digital display.
	(11) Power Supply	:	220/230V AC, single phase 50Hz with auto change Over to battery back up (12V DC).
	(12) Operating Temperature	:	-5 deg C to + 55 deg C.
	(13) Humidity	:	Up to 98%.
	(14) Duty Cycle	:	Continuous 100%.
	b.		Memory channels to be programmed as per user requirement after contract

9. Accessories for Each Set.

- a. Standard Desktop/Rack.
- b. 150 Ft Co-axial cable LDF 450(1/2 Inch) foam Helix.
- c. Connector for LDF cable.
- d. Cooling system is to be incorporated.
- e. Jumper with connector.
- f. Lighting arrester.
- g. Minimum 02 (two) hours battery backup in case of power failure.
- h. Programming kit with data cable, USB connector and software complied with Windows XP or Windows 7 or latest.

10. Manuals. One maintenance manual with parts catalogue and Two operator's manuals are to be provided with each set.
11. Brochure/Catalogue. Original brochure/catalogue are to be provided with offer.
12. Demonstration: Bidders will be required to provide demonstration of offered equipments within 2 weeks from the closing day of tender. Acceptance will be subject to satisfactory performance during demonstration.
13. After sales service: To be provided as and when required.
14. Delivery. To be mentioned
15. Validity of the offer. Quoted offer should remain valid up to 30 June 2018.
16. Spare support: Supplier is to give guarantee to supply spares for at least 05 years from date of acceptance at a reasonable price (Not beyond the normal inflation/escalation rate).
17. Training. 06 in no Coast Guard personnel are to be trained for 01 week at supplier's coast on operation and maintenance. Details to be mentioned with the offer.
18. Tools/Test Equipment. Special tools, test equipments/kits necessary for maintenance/repair are to be quoted.
19. Test and Trial Test and trial will be carried out by the buyer in presence of supplier's representative. After satisfactory test and trial, an acceptance certificate will be signed between the supplier and the buyer.
20. Installation: To be installed by the supplier at their own cost. The Antenna should be installed at 100 feet GI pipe mast be supplied by the Bidder.
21. Warranty: Minimum 12 month from the date of acceptance.
22. List of Users. List of users in Bangladesh, for the offered equipment is to be provided.
23. Compliance Report. Report on compliance/non-compliance on specification, terms and conditions to be provided with the offer.

TECHNICAL SPECIFICATION FOR 100 FEET SINGLE PIPE (G.I) GUY MAST

1.	General	100 feet Single Pipe (G.I) Guy Mast for VHF Repeater Station.
2.	Purpose	The Mast will be used for installing of VHF Repeater Station antennas.
3.	Name & Address of Manufacture	To be Mentioned.
4.	Quantity	05 (Five) in number Mast.
5.	<u>Specification</u>	
	a.	Description of material
		(1) G.I Pipe
		4" dia 20'ft (For each set)
		(2) G.I Pipe
		3" dia 40'ft (For each set)
		(3) G.I Pipe
		2½" dia 40'ft (For each set)
		(4) Turn Buckle
		15 in No (For each set)
		(5) D-Cycle
		15 inNo (For each set)
		(6) Thimble
		24 in No (For each set)
		(7) Wire clip
		80 in No (For each set)
		(8) Tower Base Plate with nut-bold
		1 in No (For each set)
		(9) Tower Light
		1 in No (For each set)
		(10) Guy wire
		As required for each mast.
		(11) Joint Nut-Bold
		20 in No (For each set)
		(12) Earthling
		1 in No (For each set)

6. **Painting:** The mast is to be painted in 'Orange and White' as per ICAA Rules. Best quality primer (red-oxide) and synthetic enamel paint (Berger/Robbialac/Elite) are to be used.

7. **Climbing Ladder:** Climbing Ladder to be provided all along from bottom-to-top facilitates easy climbing of maintenance personnel. Their specification shall be included the Detailed Design. Drawing and Engineering Analysis' submitted with the offer.