

No.IV-17017/13/06-Prov.I
Ministry of Home Affairs

18

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New Delhi , Dated 31.03.2006

To

The DGs: Assam Rifles/BSF/CISF/CRPF/ITBP/NSG/SSB/BPR&D.

Subject: Finalization of QRs/Specifications for Weaponry/Security Equipments

The Sub-Group constituted by MHA vide Office Memorandum No. IV.17017/18/2001-Prov.I dated 5-7-2002 for laying down QRs/specifications of various items/equipments has since submitted QRs in respect of the following items:-

- (a) Radio Communication Test Set
- (b) Distortion Meter
- (c) HF Man pack Transceiver

2. These recommendations have been accepted by MHA. The QRs finalized by the Sub-Group and accepted by MHA in respect of the above equipments are enclosed herewith.

3. Henceforth, all the CPMFs should procure the above items required by them to meet their operational needs strictly as per the laid down QRs/specifications.

Yours faithfully,

Alok

(Alok Mukhopadhyay)
Under Secretary(Prov.I)

Copy to : DD(Procurement), MHA

Copy for information to:

1. PS to JS(PM), MHA
2. Dir(Prov), MHA

1254/2002-06
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DMF
MHA
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SSO/E

QRs for 15W HF Transreceivers

General

1. Frequency Range : 2 MHz to 29.999 MHz
2. Mode of Operation : SSB (LSB or USB) CW/AM
3. Frequency Steps : 100 Hz
4. Frequency Control : Synthesizer
5. Frequency Stability : ± 1 ppm or better

Transmitter

1. RF Output power : Better than 15 W measured at CW
2. Harmonic Suppression : 40 db or better
3. Unwanted side band suppression : 40db or better
4. Audio response : Within 6dB from 300Hz to 3 KHz

Receiver

1. Sensitivity

CW & SSB : 0.5uV for 10dB (S+N) / N or better

2. Image rejection : > 60 db

3. Selectivity

a) CW : Better than 300 Hz at -6 db
Better than 2.5 KHz at -60 db

c) SSB : Better than 2.7 KHz at -6 db
Better than 4.5 KHz at -60 db

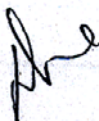
4.. AF output : > 1W across loudspeaker/
> 2.5mW across 150 ohm headphone.

Power Supply

Input Voltage : 12 VDC/ 24 VDC

Environment

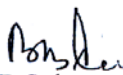
Operating temp. : - 20°C to +55°C

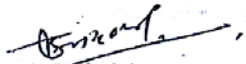


OTHER REQUIREMENTS

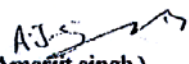
- Comm range : Set will enable reliable communication up to distance of 25 KM CFD.
- Warranty : 2 Years from date of receipt of store in good condition.
- Spares : Supplier will have the responsibility to supply required spares for a span of 8 years from the date of supply of the equipment.
- Manuals : User and technical manuals giving circuit and schematic details to be supplied along with the equipment.
- Training : Supplier will have to arrange training for a duration of 2 weeks of maintenance of equipment.
- Accessories : All essential accessories such as Antena, ATU, RF cable etc., are to be quoted separately
- Protection : (i) Reverse polarity protection should be provided .
(ii) The final RF stage be protected against high VSWR

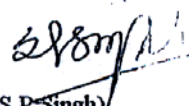

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