

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

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New Delhi , Dated 03.04. 2006

To

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

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

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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) SYNTHESIZED SIGNAL GENERATORS
- (b) SPECTRUM ANALYSER
- (c) MODULATION METER
- (d) INSULATION TESTER
- (e) BROAD BAND WIRELESS SOLUTION

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,

*Awn*

(Alok Mukhopadhyay )  
Under Secretary(Prov.I)

Copy to : DD(Procurement), MHA

*1. M/F  
2. copy to sig Bns.*

Copy for information to:

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

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**QRs / SPECIFICATIONS FOR MODULATION METER**

**RF Input**

Frequency Range : 1.5 MHz to 1 GHz

Sensitivity(Vr.m.s.) :  $\leq 10\text{mV}$

**AM Measurement**

AM Depth : 0 – 100 % (10%, 100%)

AM Accuracy :  $\pm 2\%$  rdg  
(At 1 KHz (BW 300 Hz to 3 KHz))

AM Distortion :  $< 1\%$  (AM  $\leq 80\%$ )  
(At 1 KHz (BW 300 Hz to 3 KHz))

AF Modulation Frequency : 25 Hz to 250 KHz

AM Noise :  $< 0.5\%$   
(BW 300 Hz to 3 KHz)

**FM Measurement**

FM Deviation 0 to 100 KHz

FM Accuracy  $\leq 2\%$  rdg

FM Distortion  $\leq 2\%$  rdg

AF Modulation Frequency  
BW 25Hz to 50 KHz

Residual FM :  $\leq 20\text{ Hz/ } 100\text{ Hz}$

De-emphasis : 50  $\mu\text{S}$ , 75  $\mu\text{S}$ , 750  $\mu\text{S}$

**Power** : 220 V  $\pm 10\%$  50 Hz 6 W

Size :  $< 320 \times 280 \times 100\text{ mm}$

Weight :  $< 6\text{ Kg}$

Warranty : 1 Year or, more.

Accessories:- Mains Cable, Measuring Probes, Instruction Manual.

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(Brig. M.K. Gupta)  
Dy. Inspector General(Comn), NSG

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