

Notice Inviting e-Tender No. WBPTel/DG/eNIT- 25 /Wireless Stores/2017-18

Date: 21.11.2017

The Addl. Director General & Inspector General of Police, Telecommunication, West Bengal invites Tenders on behalf of Home Department, Government of West Bengal from the bonafied manufacturers/dealers or distributors/traders & Industrial undertaking organization etc. who has tender specific authorization (desirable) for the articles under Group- A, B, C, D, E, F & G, as mentioned in the table below, as per Specifications:-

Sl. No.	Group	Items	Qty	Specification	E.M.D. (in Rs.)
1	A	Variable Output Regulated DC Power Supply	05	As per Annexure-IV (Gr-A,B,C, D E, F & G)	25,000.00
2	B	Signal Generator	02		
3	C	1.3 GHz Frequency Counter	02		
4	D	70 Mhz Dual Channel Digital Storage Oscilloscope	02		
5	E	Through Line RF Output Meter	35		
6	F	Field Strength Meter	05		
7	G	Temperature Control Soldering Iron	35		

ELIGIBILITY OF BIDDERS:

Only Manufacturers/Direct Importers/Dealers having the Tender specific authorization from OEM (Original Equipment Manufacturer) are eligible for participation in the Tender.

1. In the event of e-filing, intending bidder may download the Tender documents from the website: <http://wbtenders.gov.in> directly with the help of Digital Signature Certificate. **Earnest money Rs 25,000/ (Rupees Twenty Five Thousand) only may be remitted through Demand Draft from any Nationalized Bank in favour of Additional Director General & Inspector General of Police, Telecommunication, West Bengal** and should be submitted physically at the Office of the Addl Director General & Inspector General of Police Telecommunication, West Bengal, 3 Manik Bandyopadhyay Sarani, Tollygunj, Kolkata 700 040 under the sealed cover" as per Date & Time, mentioned in Clause 10.

2. Financial Bid is to be submitted online (both words & figures) concurrently duly digitally signed in the website: <https://wbtenders.gov.in> as per Date & Time schedule stated in Clause 10.

3. (a) A tender Bidder, after being accepted by the undersigned authority, shall be liable to supply all the items in question as per the accepted rate, for a period of one year from the date of acceptance, without any hike in the prices, whatever are the circumstantial criteria thereby.

(b) Conditional/incomplete bid will not be considered.

(c) Tenderers should specify the address within the City of Kolkata and Phone/Mobile, Fax No./e-mail I.D. for the purpose of quick communication in the event of urgency.

(d) Deviation Statement (if any) may also be enclosed.

(e) There should be an on site manufacturing guarantee/warranty as per OEM for the item with a mention of specific period. "

4. The selected contractors shall have to deposit 5% security deposit of the total contract value of the items in favour of the Additional Director General & Inspector General of Police Telecommunication, West Bengal in G P Notes/ Bank Guarantee Bond/E.D.R. of any nationalized bank and to execute an agreement of contract within 3 (three) days from the date of issue of the work order failing which the letter of acceptance, so issued, may be treated as cancelled as well as the earnest money so deposited may be forfeited and the firm may be blacklisted. No interest would be paid on the performance Security Deposit. Payment will be made as and when fund will be available from the concerned source subject to complete supply of articles.

5. Orders for the supply of the approved products will be placed with the successful tenderers after the execution of the agreements, and such supply shall have to be made in such installments as may be fixed or spread over the period to be

specified in the supply orders to be made in pursuance of the agreements. The successful tenderer will have to supply within the specified time schedule that had been assured at the time of selection as supplier.

6. Tender Specific authorization Certificate of OEM (Original Equipment Manufacturer) is desirable.

7. It should be noted that the firm/firms will be selected purely on a "PROVISIONAL BASIS" and the forecast requirement may increase or decrease by any quantity during the period of validity of the tender.

8. Additional Director General & Inspector General of Police, Telecommunication, West Bengal reserves the right to reject any/or all the tendered rates without assigning any reason and not to place any orders even after selection and is not liable for any cost that might have incurred by any bidder at the stage of bidding and also reserves the right to, divide the contract amongst any number of tenderers, if required so.

Additional Director General & Inspector General of Police Telecommunication, West Bengal does not bind himself to accept the lowest rate.

9. Selected contractors will have to supply articles according to the indents placed with them from time to time within the specified period as per approved sample and/or the product demonstrated for inspection and evaluation, failing which the firm may be blacklisted with the forfeiture of security deposit. In the event of the non-supply of articles or if articles supplied by the selected contractors) is found to be sub-standard, the Additional Director General & Inspector General of Police Telecommunication, West Bengal may (without notice to the contractors) purchase from elsewhere the articles required. Any loss incurred by reason of the price paid for such article(s) or any other loss or expense incurred by reason of such default on the part of the contractors may be deducted from the bills or any money payable to the contractors or from the security deposit of the concerned contractor(s). If the performance of the supplied items/equipment are found unsatisfactory or not as to our desired level even after payment, the supplier has to refund the entire amount paid to him earlier for that particular item/equipment.

10. DATE & TIME SCHEDULE:

SI. No.	Particulars	Date & Time
1	Date of uploading of NIT Documents (Online)	21.11.2017 at 1800 Hrs
2	Documents download/Sell Start date (Online)	21.11.2017 at 1800 Hrs
3	Date of hoisting of documents at Departmental Website "policewb.gov.in"	23.11.2017 at 1800 Hrs
4	Bid submission start date (Online)	21.11.2017 at 1800 Hrs
5	Bid submission closing date (Online)	06.12.2017 at 1400 Hrs
6	Last date of submission of Earnest Money Deposit and self attested copies of (Offline)	06.12.2017 at 1400 hrs
7	Technical Bid opening (Bid A)	08.12.2017 at 1200 Hrs
8	Demonstration of the equipments starting date (Ref. Annexure-IV)	11.12.2017 at 1100 Hrs
9	Demonstration of the equipments end date	12.12.2017 at 1700 Hrs
10	Date of uploading list of technically qualified bidders	To be notified later
11	Date for opening of Financial Proposal (Bid B) (Online)	To be notified later
12	Date of uploading list of bidders along with the approved rates	To be notified later

11. Bid opening Location: Office of the Additional Director General & Inspector General of Police, Telecommunication, West Bengal, 3 Manik Bandyopadhyay Sarani, Tollygung, Kolkata 700 040.

12. Canvassing on the part of tenderers will render his tender to cancellation summarily.

13. **For any queries regarding Tender, Tenderers are requested to contact with Inspector(Stores) , Telecommunication Hqrs., 3 Manik Bandyopadhyay Sarani, Tollygunj, Kolkata 700 040.**

NB: Any inconsistencies in the descriptions may be expeditiously brought to the notice of the Tendering authority.

INSTRUCTIONS TO BIDDERS

GENERAL GUIDANCE FOR e-TENDERING:

Instructions/ Guidelines for electronic submission of the tenders have been annexed for assisting the contractors to participate in e-Tendering.

I. REGISTRATION OF THE CONTRACTOR:

Any contractors willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement System, through logging on to <https://wbtenders.gov.in> (the Web Portal of Public Works Department) the contractor is to click on the link for e-Tendering site as given on the web portal.

II. DIGITAL SIGNATURE CERTIFICATE (DSC):

Each Contractor is required to obtain a Class-II OR Class-III Digital Signature Certificate (DSC) for submission of tenders for the approval service of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the website stated in Clause-I above DSC is given as a USB e-Token.

III. The contractor can search & download N.I.T. & Tender Document(s) electronically from computer once he logs on to the website mentioned in clause-I using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

IV. SUBMISSION OF TENDERS:

Tenders are to be submitted through online to the website stated in Clause-I in two folders at a time for each work, one in Technical Bid & the other is Financial Bid before the prescribed date & time using the Digital Signature Certificate (DSC). The documents are to be uploaded virus scanned copy duly Digital Signed. The documents will get encrypted (transformed into non readable formats).

V. PENALTY CLAUSES:

PENALTY FOR FORMATION OF CARTEL OR FURNISHING OF FRAUDULENT / MISLEADING DOCUMENTS: If during the tender process or at any state during the validity of the tender period, it is found that a Tenderer(s) has formed a cartel in what so ever form or name to fix up the rates or suppliers to the detriment of the fairness of the tender process, penal measures shall be initiated. Similar penal measures shall also be initiated against those tenders who have submitted false / misleading / fraudulent documents or made incorrect declarations. The penal measure will be forfeiture of Earnest Money, Forfeiture of Performance Bank Guarantee if enlisted as a supplier.

VI. TECHNICAL PROPOSAL:

The Technical proposal should contain scanned copies of the following in two covers (folders).

(a) Statutory Cover containing the following documents:

- (1) NIT (2) EMD (3) AGREEMENT PAPER (AS ANNEXTURE-III) (4) TECHNICAL SPECIFICATIONS & WARRANTIES AS PER OEM

(b) Non-statutory Cover containing the following documents:

THE ABOVE STATED NON-STATUTORY/TECHNICAL DOCUMENTS SHOULD BE ARRANGED IN THE FOLLOWING MANNER:-

Click the check boxes beside the necessary documents in the My Document list and then click the tab "Submit Non Statutory Documents" to send the selected documents to Non-Statutory folder.

Next Click the tab "Click to Encrypt and upload" and then click the "Technical" Folder to upload the Technical Documents.

SI. No.	Category Name	Sub-Category Description	Detail(s)
A	Certificate(s)	Certificate(s)	GST Registration, Trade License, Income Tax/PAN, Letter of Authorization/DPL (Dealer Possession License)/ OEM (Original Equipment Manufacturer), Latest P.Tax (Challan).
B	Company Detail(s)	Company Detail	Proprietorship Firm (Trade License) Partnership Firm (Partnership Deed, Trade License), Ltd. Company (Incorporation Certificate, Trade License) Society (Society Registration Copy, Trade License) Power of Attorney.
C	Credential	Credential - 1	Similar nature of work done & completion certificate, which is applicable for eligibility in this tender.
D	Returns	Income Tax	Last 3 Financial Year's of Income Tax i.e. for 2014-15 2015-16 & 2016-17

NOTE: BLACK & WHITE SCAN, MULTIPAGE SCAN, DPI MAX 200-300

1. FINANCIAL PROPOSAL:

(a) The contractor is to quote the rate online through computer in the space marked for quoting rate in the BOQ (Bill of Quantities). *The Quoted Rate should not be higher than printed MRP.*

(b) If any contractor is exempted from payment of EMD, copy of relevant Government Order needs to be furnished.

(c) The financial proposal should contain the following documents in one cover (folder) i.e., BOQ (Bill of Quantities).

(d) Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the contractor. If any tenderer fails to produce the original hard copies of the documents like Completion Certificates and any other documents on demand of the Tender Evaluation Committee within a specified time frame or if any deviation is detected in the hard copies from the uploaded soft copies, it may be treated as submission of false documents by the tenderer and action may be referred to the appropriate authority for prosecution as per relevant IT Act.

OPENING & EVALUATION OF TENDER:

1. Opening of Technical Proposal: A Committee comprising of Superintendent of Police, Deputy Superintendent of Police, and a team of Technical officers of Telecommunication West Bengal will open the Technical bid of the Tender.
2. Intending Tenderers may remain present if they so desire.
3. Cover (folder) for Statutory Documents will be opened first and if found in order, cover (folder) for Non-Statutory Documents will be opened. If there is any deficiency in the Statutory Documents the tender will summarily be rejected.
4. Decrypted (transformed into readable formats) documents of the non- statutory cover will be downloaded & handed over to the Tender Evaluation Committee.
5. Summary list of technically qualified tenderers will be uploaded online.
6. Pursuant to scrutiny & decision of the Tender Evaluation Committee the summary list of eligible tenderers & the serial number of work for which their proposal will be considered will be uploaded in the web portals.
7. During evaluation, the committee may summoned of the Tenderers and seek clarification/information or documents or original hard copy of any of the documents already submitted and if these are not produced within the stipulated time frame, their proposals will be liable for rejection.

II. REJECTION OF BID:

The Additional Director General & Inspector General of Police Telecommunication, West Bengal reserves the right to reject any/or all the tendered rates without assigning any reason and not to place any orders even after selection and is not liable for any cost that might have incurred by any bidder at the stage of bidding and also reserves the right to divide the contract amongst any number of Tenderers if required so and to place order for more or less than the quantity mentioned in the forecast requirement. The Additional Director General & Inspector General of Police, Telecommunication, West Bengal does not bind himself to accept the lowest rate.

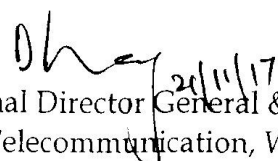
III. AWARD OF CONTRACT:

The Bidder whose Bid has been accepted will be notified by the Tender Inviting & Accepting Authority through acceptance letter / Letter of Acceptance both online & offline to save time. The notification of award will constitute the formation of the Contract. The Agreement in prescribed format in admissible stamp duties will incorporate all agreements between the Tender Accepting Authority and the successful bidder/bidders. The time frame for attending the fault and restoration of equipment within the warranty period and penalty clause for the defaulters will be included in the agreement. All the tender documents including N.I.T. & B.O.Q. will be the part of the contract documents. After receipt of Letter of Acceptance, the successful bidder shall have to submit requisite copies of contract documents downloading from the website stated in the N.I.T. along with requisite cost through Demand Draft issued from any nationalized bank in favor of Additional Director General & Inspector General of Police Telecommunication, West Bengal for the concerned work within time limit to be set in the letter of acceptance.

Payment Terms: Payment would be released after one month's successful operation of the equipments.

IV. VALIDITY PERIOD:

The contract period will be up to December, 2018.


Additional Director General & Inspector General of Police
Telecommunication, West Bengal

FORMAT FOR CHECK LIST

Sl.No.	Items	Pl mark ✓		Page No.
1	Application submitted in Annexure - I	Yes	No	
2	Annexure - II (Authorization letter of signatory from the Company)	Yes	No	
3	Annexure - III (Copy of agreement between the manufacturer and the Distributor)	Yes	No	
4	Copy of PAN Card of the authorized signatory	Yes	No	
5	Copy of Demand Draft/Pay order as applicable in favour of the Director General & Inspector General of Police Telecommunication, West Bengal - as Earnest Money	Yes	No	
6	Last 3 financial years' returns of Income Tax, i.e., for 2014-15 2015-16 & 2016-17	Yes	No	

Annexure - I

APPLICATION FORMAT

(To be furnished in the Company's official letter pad with full Address and Contact No., etc.)

**To: The Additional Director General & Inspector General of Police
Telecommunication, West Bengal
3 Manik Bandyopadhyay Sarani
Tollygunj, Kolkata 700 040**

Sub: NIT for Wireless Stores at Office of the Additional Director General, & Inspector General of Police,
Telecommunication, West Bengal, 3 Manik Bandyopadhyay Sarani, Tollygunj, Kolkata 700 040.

Ref:

Sir,

Having examined the pre-qualification & other documents published in the NIT, I/we hereby submit all the necessary information and relevant documents for evaluation:

1. That the application is made by me / us on behalf of

In the capacity of.....duly authorized to submit the offer. The authorization letter from the Company is attached in Annexure II.

2. We accept the terms and conditions as laid down in the NIT mentioned above and declare that we shall abide by it for throughout the tender period.

3. We are offering rate for the following item /items and assured supply to the West Bengal Police Telecommunication, Government of West Bengal as mentioned in Page-1.

4. (a) We propose that the order and bill should be raised in our name. For liaisoning, we have appointed M/s having its office at (Address, Contact No. and e-mail address) as C&F agent /Liaisoner /Contact person/..... Others (strike out whichever is not applicable) as per clause of the NIT
OR

(b) We propose that order and bill should be raised in favour of our authorized Distributor. For that purpose, we have appointed M/s having it's office at (Address with contact No. and e-mail Address) as authorized Distributor who will receive order and payment in his name on our behalf.

(c) The agreement between ourselves and the distributor/C&F/Liaisoner& other documents as prescribed is attached in annexure III .

5. In the event of being selected, supply will be made within the stipulated period excepting the condition which is beyond our control.

6. We understand that:

(a) Tender Selection Committee can amend the scope & value of the contract bid under this project.

(b) Tender Selection Committee reserves the right to reject any application without assigning any reason.

Date:-

Signature of applicant including title.

and capacity in which application is made.

Telephone No.:

Mobile No.:

e-Mail Address:

Annexure - II

Authorization letter from Company for authorized signatory.

Annexure - III

Copy of agreement signed between tenderer and the distributor etc.

Annexure-IV

Group:- A

SL. No.	Item Description with Technical Specifications	Quantity
1	<p style="text-align: center;">Variable Output Regulated DC Power Supply [Output Voltage: 0 to 32V Output Current: 0 to 30A]</p> <p>Constant Voltage Mode : REGULATION : Line : $\pm 0.01\% \pm 2\text{mV}$ for $\pm 10\%$ change in line voltage. Load : $\pm 0.01\% \pm 2\text{mV}$ for load change from zero to full load. RIPPLE AND NOISE : 1mV rms max. 20Hz to 20MHz. Constant Current Mode : REGULATION : Line : $\pm 0.05\% \pm 10\text{mA}$ for $\pm 10\%$ change in line voltage. Load : $\pm 0.05\% \pm 10\text{mA}$ for change in output voltage from 0 volts to maximum output voltage. Mode Indication : Precision Display LED for constant voltage / constant current Output. Output Polarity : Floating w.r.t. ground. Overload Protection : Constant current type. Transient Response : 100μsec within 10mV of set output voltage for load change from 10% to 90%. Stability : Total drift within 8 hours, after 30 minutes warm-up under constant line, load and temperature. < $\pm 0.2\% \pm 10\text{mV}$ in CV mode. < $\pm 0.5\% \pm 10\text{mA}$ in current mode. Operating Temperature : 0 to 50 C. Temp. Coefficient : $\pm 0.05\% \pm 5\text{mV}$ per OC after initial warm-up of 30 minutes, in voltage mode. Line Voltage : 230V AC $\pm 10\%$, single phase 50Hz Metering : 3 digit DPMs for voltage and current measurement. Meter Accuracy : ± 3 counts. #Operational Manual must be supplied with the equipment# ## Effective demonstration with our existing VHF sets should be arranged at this office##</p>	5 (Five)

Signal Generator
Specification

Quantity-
2 (Two)

Frequency Range : 0.01Hz to 1MHz in 8 decade ranges

Frequency Indication : $\pm 1\%$ ± 1 digit.

Output Impedance : 50 ohms

Frequency Indication Accuracy: $\pm 1\%$ +1 digit

Output Waveforms: Sinusoidal, Triangle, Square, Ramp, Pulse, TTL (Sync) & DC Outputs.

Sine Distortion: <1%(typical)

Square Wave Rise / Fall Time: <75nsec.

Frequency Stability: < 0.5% of Frequency setting (after ½ hour warm up)

Duty Cycle : 10% to 90% variable.

Maximum Output Voltage

a) Into 50 ohms 10V p-p output.

b) Open Circuit 20V p-p output.

Input Phase Variation.

AC Mains Power : 230V AC $\pm 10\%$, 50Hz., 15VA. (Approx.)

#Operational Manual must be supplied with the equipment#

Effective demonstration with our existing VHF sets should be arranged at this office##

Group-C

1.3 GHz Frequency Counter

Specification

Frequency Range :

Input A : 0.2Hz to 110MHz.

Input B : 50MHz to 1300MHz.

Gate Time : 10mSec, 100mSec, 1Sec, 10Sec selectable. **Resolution :** 100n Hz to 10KHz.

Accuracy : ± 1 count \pm time base accuracy.

Sensitivity : Input A : 0.2Hz to 50MHz - 30mVrms

50MHz to 100MHz - 50mVrms

100MHz to 110MHz - 100mVrms

Input B : 50MHz to 1.1GHz - 30mVrms

1.1GHz to 1.3GHz - 60mVrms

Input Impedance : Input A : 1M ohm // 25pF nominal.

Input B : 50 ohms nominal.

Max. Input Voltage :

Input A : DC to 5KHz : 300V (DC + AC pk). 5KHz to 110MHz : $5.5V + (1.25 \times 106 \text{ rms})$ (Freq in Hz)

Input B : DC - 50V. AC - 3V rms.

Attenuator : x1 & x10.

Period Measurement Range :

Quantity-

2 (Two)

Input A : 10 nsec to 5 sec.

Annunciators : LED indication for overflow, Display Hold, Freq. offset mode, Measurement mode (Freq. A conventional & normal, Freq. B, period A, ns, μ s, ms, sec., MHz, KHz & Hz).

Gate time: (0.01, 0.1, 1, 10 in sec.),

Time Base Internal

Time Base Freq. : 10MHz oven controlled.

Stability Over Temp. : $<\pm 1 \times 10^{-7}$. Range (0 to 50OC) Short term stability : $>< 5 \times 10^{-8}$ / s.

Long term stability : $< 5 \times 10^{-7}$ / day.

Warm-up Time : 15 minutes.

Time Base External Time Base Freq. : 10MHz .

Sensitivity : 2V p-p (min.), 5V p-p (max.).

General Interface : RS232 (Optional).

Power : 230V AC $\pm 10\%$, 50Hz & EXT BATT operation.

#Operational Manual must be supplied with the equipment#

Effective demonstration with our existing VHF sets should be arranged at this office##

70MHz Dual Channel Digital Storage Oscilloscope

Specification

ACQUISITION :

Sample Rate Real-Time Sample: 1GS/s;

Equivalent Sample: 25GS/s.

Acquisition Modes: Normal, Peak Detect, High-frequency and random, glitch capture, Average (selectable 4, 8, 16, 32, 64, 128.)

Input Coupling: AC, DC, GND

Input Impedance: 1MW $\pm 2\%$, 20pF $\pm 3\text{pF}$.

Probe Attenuation: 1X, 10X (two sets of Spare Probes)

Input Voltage: CAT I and CAT II : 300V RMS (10X); Installation Category III : 150V RMS (1X); Installation Category II : derate at 20dB/decade above 100kHz to 13V peak AC at 3MHz and above. For non-sinusoidal waveforms, peak value must be less than 450V. Excursion above 300V should be of less than 100ms duration. RMS signal level including all DC components removed through AC coupling must be limited to 300V. If these values are exceeded, damage to the oscilloscope may occur.

HORIZONTAL:-

Record Length : 24K.

SEC/DIV Range: 4ns/div to 40s/div, in a 2, 4, 8 sequence.

Sample Rate and Delay Time Accuracy: $\pm 50\text{ppm}$ (at over any =1ms time interval). **Position Range :** 20ns/div to 80us/div; (-8div x s/div) to 40ms; 200us/div to 40s/div; (-8div x s/div) to 400s;

Delta Time Measurement: Single-shot, Normal mode : \pm (1 sample interval + 100ppm x reading + 0.6ns); Accuracy (Full Bandwidth) >16 averages : \pm (1 sample interval + 100ppm x reading + 0.4ns); Sample Interval = s/div \div 200.

VERTICAL:-

Vertical Resolution: 8-bit resolution, all channel sampled simultaneously.

Volts / Div Range : 2mV/div ~ 5V/div.

Position Range: 2mV/div to 200mV/div; $\pm 2\text{V}$; 200mV/div to 5V/div; $\pm 50\text{V}$.

Bandwidth: 70MHz;

Quantity-

2 (two)

Rise Time at BNC (Typical): 5ns

Math Functions: +, -, *, ÷, FFT.

FFT Windows : Hanning, Flatop, Rectangular, Bartlett, **Blackman**; 1024 sample point.

Bandwidth Limit : 20MHz.

TRIGGER

Trigger Types: Edge, Video, Pulse, Slope, Over time, Alternative

Trigger Source: CH1, CH2, EXT, EXT/5, AC Line

Trigger Modes: Auto, Normal

Coupling Type: DC, AC, Noise Reject, HF Reject, LF Reject

Trigger Frequency Counter: Readout Resolution 6 digits.

Accuracy (Typical): ±30ppm (including all frequency reference errors and ±1 count errors).

Cursor Measurement Manual :

Voltage difference between cursors : DV;

Time difference between cursors : DT;

Reciprocal of DT in Hertz: (1/DT);

Tracing : The voltage and time at a waveform point

Auto Measuerment: Frequency, Period, Mean, Pk-Pk, Cycli RMS, Minimum, Maximum, Rise time, Fall Time, +Pulse Width, -Pulse Width. Delay 1-2 Rise, Delay 1-2 Fall, +Duty, -Duty, Vbase, Vtop, Vmid, Vamp, Overshoot, Preshoot, Preiod Mean, Preiod RMS, FOVShoot, RPRESshoot, BWIDTH, FRF, FFR, LRR, LRF, LFR, LFF

Display Type: 7" 64K color TFT (diagonal liquid crystal). **Display Resolution:** 800 horizontal by 480 vertical pixels

Input Supply Voltage: 120 - 240V AC RMS (±10%), 45Hz to 66Hz, CAT II.

Power Consumption <30W.

#Operational Manual must be supplied with the equipment#

Effective demonstration with our existing VHF sets should be arranged at this office##

Group-E

<p style="text-align: center;"><u>Through Line RF Output Meter</u></p> <p style="text-align: center;"><u>Specification</u></p> <p>Power Range: 100 mW to 10 kW (using Plug-in Elements)</p> <p>Frequency Range: 450 kHz - 2.7 GHz (depending on Elements)</p> <p>Insertion BSWR: 1.05 Max to 1000 MHz (with N-Connector)</p> <p>Accuracy : + / - 5% of full scale.</p> <p>Connector : QC Type (normally N-Female)</p> <p>Standard Element : a) Power Range- 100 Watt ,</p> <p style="padding-left: 100px;">b) Frequency Band (MHz) : 50-125 & 100 - 250</p> <p style="padding-left: 100px;">(one each with one Unit)</p>	<p style="text-align: center;">Quantity</p> <p style="text-align: center;">35 (Thirty Five)</p>

Group-F

<u>Field Strength Meter</u>	
<u>Specification</u>	
Frequency Range: 10 MHz – 6 GHz	
DANL (Maximum) : -135 dBm (1Hz)	
Maximum Power at RF input : + 10 dBm	
RBW (Resolution bandwidth) : 10 KHz – 50 MHz or better	
Demodulator : AM / FM	
Detector : RMS / MinMax	Quantity
Units : dBm , dB μ V , V / m , A / m , W / m ² (dB μ V/m etc. via PC	5 (Five)
s/w)	
Lowest Sample Time : 10 ms	
Accuracy(Typical) : + / - 2 dB	
Antenna design : biconical with frequency range 30 MHz – 1Ghz	
Gain: 1 dBi to 41 dBi	
RF Connection : SMA (Female) or N with adaptor .	

Group-G

<u>Temperature Control Soldering Iron</u>	
<u>Specification</u>	
“goot” Make Model PX-501 / 501(AS) or Equivalent with replacement tips (PX-60 RT-SB , PX-60 RT-B , PX-60 RT-LB) Tungsten Make	Quantity 35 (Thirty Five)