

GOVERNMENT OF ARUNACHAL PRADESH OFFICE OF THE DIRECTOR GENERAL OF POLICE ITANAGAR

No. PHQ/WT/PP-33/2024

Dated Itanagar, the 9th Dec /2024

TENDER NOTICE

On behalf of the Governor of Arunachal Pradesh, Director General of Police, Arunachal Pradesh, Itanagar invites Sealed Tender under two Bid systems (Technical & Financial Bid) from the manufacturers, authorized agents/ dealers/suppliers of reputed firms from Arunachal Pradesh for entering into contract for supply of Training equipments for Signal Training Centre at PTC Banderdewa for SP(Telecom) Office , Chimpu , Arunachal Pradesh . For details please visit our web site - www.arunpol.nic.in.

Sd/-Director General of Police Arunachal Pradesh Itanagar

(Not to be published)

No. PHQ /WT/PP-33/2024

Dated Itanagar, the 11th Dec/2024

Copy to :-

- The Director of Information and Public Relations, Govt. of Arunachal Pradesh, Naharlagun
 for information and wide Circulation. He is also requested to pass necessary order for
 publication of the above Tender Notice in one leading News paper of Arunachal Pradesh
 and one news paper of National Daily based in New Delhi.
- 2. The In-charge Computer Cell, PHQ, Itanagar for uploading of tender documents along with Specifications in the website of Arunachal Pradesh Police.
- 3. Office copy

Superintendent of Police(Telecom)
Chimpu Itanagar

Superintendent of police (Telecom) Aruachal Pradesh Itanagar

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il no	Name of equipments	Approximate Cost
1.	Synthesized signal Generator	Rs. 2,00,000/-
2.	Digital Audio output meter	Rs.11,000/-
3.	characteristic of FET, MOSFET & UJT	Rs.11,000/-
4.	Multiplexer and De-multiplexer trainer	Rs.11,000/-
	Flip-flop Demonstrator	Rs.11,000/-
5.	Experimentation with Astable and Monostable Multivibrator	Rs. 11,000/-
6.	Experimentation with Rectifiers	Rs.40,000/-
7.	Transmission line trainer	Rs. 28,000/-
8.		Rs.1,30,000/-
9.	Antenna training System	Rs.3,500/-
10.	Drill Machine	Rs. 17,500/-
11.	Soldering iron	Rs.625/-
12.	De-soldering pump	Rs.5000/-
13.	Hot-soldering Gun	Rs.6000/-
14.	Digital multi meter	Rs.25,500/-
15.	Soldering station	Rs.1,95,000/-
16.	Digital RF Output meter	Rs.54,000/-
17.	Digital AF Output meter	Rs.35,700/-
18.	Digital AM/FM Standard signal generator	Rs.83,158/-
19.	Automatic Photostat (Xerox) and scanner Machine	Rs.39,500/-
20.	Cathode –Ray Oscilloscope (CRO)	Rs.7,00,000/-
21.	Desktop computer 11 Gen with all accessories	Rs.45,000/-
22.	Computer table	Rs.75,000/-
23.	Computer chair with adjustable height	Rs.1500/-
24.	LAN Cable (CAT 6)	Rs.400/-
25.	LAN PORT(Face Plate , Gang Box)	Rs.1200/-
26.	LAN Caching	Rs.5000/-
27.	Switch rack 9U with power strip and cable	Rs.6,420/-
28.	CAT 6 patch cords(2.5 Meters)	Rs.5000/-
29.	Patch panel 24 port	
30.	24 port L2 Switch	Rs.30,000/-
31.	Sound proofing of Morse Lab at signal training Centre (PTC)	Rs.1,00,000/-
32.	Dual seater wooden desk for class room with (2 ft x 4 ft)	Rs.2,40,000/-
33.	Re-laying of Morse lab.	Rs.90,000/-
34.	Morse code processor	Rs.90,000/-
35.	Speaker	Rs.6000/-
36.	Class room Morse Oscillators	Rs.1,50,000/-
37.	Morse Key with lead	Rs.1,00,000/-
38.	Head goar assembly	Rs. 1,20,000/- :- Rs. 26,84,003/-



2. Critical date sheet :-

SI	Particulars	Date	Time
•			
1	Date of publication of Tender	12/12/2024(Thursday)	Morning
2	Bid submission start date	From the date of publication onward	-
3	Bid submission end date	03/01/2025 (Friday)	1100 hrs.
4	Physical submission of earnest Money deposit/Bid Money and cost of Tender Documents (Tender fee).	Shall be submitted with Technical bids. However, the tenderer who want to obtain tender document from SP(Telecom) Office chimpu, tender fee of Rs. 1000/- (Bank Draft in favour of SP(Telecom)Chimpu, payable at SBI, Itanagar) may be furnished at the time of obtaining the tender documents.	
6.	Date of Technical bid opening.	03/01/2025	1130 hrs

3. The Technical and Financial bids are to be sealed separately in two different envelopes clearly super scribing "Technical bid "and "Financial bid" and then both are to be kept in one envelope and sealed properly. The sealed tender/ bids should be super scribed with "Tender for WT Equipments and addressed to Superintendent of Police(Telecom), Chimpu, Itanagar, Arunachal Pradesh -791113".

Envelope -1:- It shall contain copies of eligibility information as under :-

- a) Technical bid along with its specification leaflets, brochure & catalogue.
- b) Tender documents duly completed and signed but without indication of the rates "Quoted".
- c) Earnest Money @ 2 % of estimated cost of the items being quoted from the list of item must be submitted in form of DD/TDR/FDR of Nationalized Bank/Post offices duly pledged in favour of SP(Telecom), Chimpu Itanagar along with the Technical bid. Tenders without earnest money will be summarily rejected.
- d) Attested copy of PAN Card, GST Registration and Income tax return of last three years of the vendor/firm.
- e) Valid Trading license issued by competent authority for the tendered items.
- f) Authorization certificate from OEM for the tendered item.
- g) Undertaking from Vendor/Firm that they will provide after sale service for next 5(five) years from the date of delivery of the item.
- h) Undertaking from Vendor/Firm that Items are not Made in China or any way related to any Chinese company/Vendor.
- i) Financial soundness certificate of vendor/firm from the concerned Branch Manager of Bank from where the firm operates.
- j) Experience certificate of firm which must contain name, designation, address, Phone No., Mail ID (if any) of Issuing Officer. The certificate should be countersigned by concerned Head of Office/Department
- k) Any other relevant documents which the firm wishes to submit.
- Proper Index with page number shall be made for all the submitted documents. Each document shall have page number at the top right hand side as indicate in Index page. Document not mentioned in the index will be treated as not submitted.

Envelope -2:- It shall contain documents on "Financial Bid". Financial bid should indicate item wise price separately indicating the tax etc. for the items mentioned in the technical bids. Financial bids shall be opened only of those bidders who have been declared technically qualified by the committee.

GENERAL INSTRUCTION:-

- The tenders received after scheduled date & time will not be entertained. The tenderers or their representative may remain present at the time of opening of tender.
- 2. Rates must be clearly written in figures as well as in words.
- There should not be any cutting/over writing.
- 4. The Tenderer/Firm those who fails to fulfill the eligibility conditions will be summarily rejected.
- 5. The representative of the firm should present with all the original documents at the time of opening the bids .
- 6. In case tender opening day is declared as holiday or bandh call at Itanagar, the tenders shall be received upto next working day till 1100 hrs and opened on the same day at 1130 hrs at the official chamber of IGP(Admin) ,PHQ , Itanagar,Arunachal Pradesh.
- 7. The bidders should keep checking the website for any notification/corrigendum wrt Tender notice/bidding documents till the date of submission of bids and the bidder should incorporate the same in his bid documents.
- 8. Conditional bids and the bids not meeting the qualifying criteria on the date of receipt of bids shall be summarily rejected.
- 9. Bids will be opened as per time & schedule mentioned.
- 10. Before submission of bids, bidders must ensure that all the necessary documents have been attached with proper index indicating page no. of all the submitted documents.
- 11. The department will not be responsible for delay in submission due to any reason(s).
- 12. All the required information for the bid must be filled and submitted.
- 13. Technical compliance statement should be enclosed along with technical bid clearly specifying deviation, if any for all specifications mentioned in the tender.
- 14. The tender documents can be obtained from Office of the Superintendent of Police (Telecom) ,Chimpu, Itanagar on payment of tender fee of Rs. 1000/- (Non refundable through a bank draft in favour of the SP(Telecom) Chimpu,Itanagar,Arunachal Pradesh payable at S.B.I. Itanagar on any working day from 0930 hrs to 1600 hrs w.e.f 12/12/2024 to 02/01/2025. The tender documents may also be downloaded from our website(arunpol.nic.in). The tenderer downloading the tender documents from website are also required to submit a Bank Draft of Rs. 1000/- as tender fees alongwith Technical bid. No other mode of payment will be accepted.
- 15. Earnest Money of Technically qualified vendor/firm will be forfeited to the Government in case of failure to furnish Performance Security and execution of "DEED OF AGREEMENT".
- 16. The earnest money deposit is normally to remain valid for a period of 45(forty-five) days beyond the final bid validity period.
- 17. Successful tenderers will be required to deposit 5 % of the total value of the articles to be supplied as Performance Security within 15 days from the date of issue of letter of acceptance of tender and also have to enter into a "DEED OF AGREEMENT" stipulating the Terms and Conditions of the contract.
- 18. Security deposit will be subject to forfeiture in case of non-fulfillment of any or all the Terms and Conditions of contract. Performance security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligation from the date of Acceptance of stores by Government nominated Verification Committee to ensure satisfactory performance of the equipments.



- 19. Rate should be quoted F.O.R SP(Telecom) Chimpu, Itanagar. Rates quoted F.O.R other than SP(Telecom) Chimpu, Itanagar shall not be accepted. No packing or forwarding charges will be allowed. The rate of GST (as applicable) may be charged/quoted by the tenderers and the amount be clearly mentioned for all items. The rate should be quoted in Indian currency both in figure and words clearly. Tenders must be eligible and clear in all respect else the tenders shall be liable to be rejected.
- 20. The sealed tender should be sent by Registered post or put in the Tender Box kept in the office of the undersigned SP(Telecom), Chimpu, Itanagar (A.P) on any working day from 0930 hrs to 1600 hours.
- 21. Successful tenderers have to supply the items within 90(ninety) days from the date of issue of Supply order failing which 5 % of Performance Security will be forfeited and supply order will be cancelled OR sum equivalent to 0.5 % of delivery price of the delayed items for each week delayed or part thereof beyond the original contract delivery period will be recovered to a maximum of 10 % as a liquidated damages(LDs).
- 22. Any breakage or loss of any item will be at the supplier's risk.
- 23. If any item is found damaged or otherwise unacceptable at the time of delivery/inspection, the supplier will be required to replace the same from SP(Telecom) office, Chimpu Itanagar, Arunachal Pradesh at their own cost within 15 days.
- 24. Payment will be made to the supplier directly on completion of supplies and Acceptance of Stores by Government nominated Verification Committee.
- 25. The Director General of Police of Arunachal Pradesh, Itanagar shall have the right to ask the firms to demonstrate their items before the opening of financial bids. Vendor/Firm qualified in initial scrutiny shall provide a practical demonstration of equipment in compliance with the specification of tender for Technical evaluation.
- 26. Bill of quantity (BOQ) enclosed as Annexure A & List of equipment with specification is enclosed at Annexure B.
- 27. Tenders will remain valid up to 31-03-2025
- 28. All items to be supplied shall have warranty for minimum of 2 years from the date of acceptance of store by government nominated verification committee (except for consumable items)
- 29. Vendors are required to submit undertaking that they will provide after sale service for next 5(five) years from the date of acceptance of the item.
- 30. The Director General of Police, Arunachal Pradesh, Itanagar reserves the right to reject the lowest or all or any of the tenderer without assigning any reason thereof.
- 31. In case of any dispute, legal jurisdiction will be at Itanagar, Arunachal Pradesh.
- 32. In case of any query tenderers may contact at following phone no./mail ID.

Officers	Telephone	E-mail ID	
Dy.Superintendent of Police(T)/Plng Chimpu ,Itanagar,Arunachal Pradesh.	9436288680	sptelecomapp@gmail.com	

Note :- For more details visit Arunachal Police website www.arunpol.nic.in

Superintendent of Police (Telecom)

Chimpu ,Itanagar, Arunachal Pradesh.

Superintendent of police (Telecom) Aruachal Pradesh

Itanagar

Bill of Quantity (BOQ)

SI	Name of equipments	Qty	Remarks
1.	Synthesized signal Generator	02 No.	
2.	Digital Audio output meter	02 no.	
3.	characteristic of FET, MOSFET & UJT	02 no.	
4.	Multiplexer and De-multiplexer trainer	02 no.	
5.	Flip-flop Demonstrator	02 no.	
6.	Experimentation with Astable and Monostable Multivibrator	02 no.	
7.	Experimentation with Rectifiers	02 no.	
8.	Transmission line trainer	02 no.	
9.	Antenna training System	02 nos.	
10.	Drill Machine	01 nos.	
11.	Soldering iron	05 no.	
12.	De-soldering pump	05 nos.	
13.	Hot-soldering Gun	05 nos.	
14.	Digital multi meter	03 nos.	
15.	Soldering station	03 nos.	
16.	Digital RF Output meter	03 nos.	
17.	Digital AF Output meter	03 nos.	
18.	Digital AM/FM Standard signal generator	03 nos.	
19.	Automatic Photostat (Xerox) and scanner Machine	01 no.	
20.	Cathode –Ray Oscilloscope (CRO)	01 no.	
21.	Desktop computer 11 Gen with all accessories	15 nos.	
22.	Computer table	15 nos.	
23.	Computer chair with adjustable height	15 nos.	
24.	LAN Cable (CAT 6)	01 case	
	and these followed the Control of th	(100	
		mtr)	-
25.	LAN PORT(Face Plate , Gang Box)	20 nos.	
26.	LAN Caching	12 nos.	
27.	Switch rack 9U with power strip and cable	01 nos.	
28.	CAT 6 patch cords(2.5 Meters)	30 nos.	
29.	Patch panel 24 port	01 no.	
30.	24 port L2 Switch	01 no.	
31.	Sound proofing of Morse Lab at signal training Centre (PTC)	1 job	
32.	Dual seater wooden desk for class room with (2 ft x 4 ft)	15 nos.	
33.	Re-laying of Morse lab.	30 nos.	
34.	Morse code processor	02 nos.	
35.	Speaker	02 nos.	
36.	Class room Morse Oscillators	10 nos.	
37.	Morse Key with lead	100 nos.	
38.	Head gear assembly	30 nos.	



Technical Specifications

(Warranty: 2 years & User Manual included)

01. Synthesized Signal Generator (SSG)

Type

Digital

Frequency

9 KHz to 3 GHz

Weight

14Kg

Voltage

230v

Power

230V+/-10%AC, 50Hz+/-3%

02. DIGITAL AUDIO OUTPUT METER

Display: 3 % Digit, 0.5'' LED display or better Accuracy: $\pm 0.5\%$ of rdg. ± 2 digit or better Frequency: 10Hz to 20KHz flat response

Load ohms: 4, 8, 16, Ohms

Load rating: 200 watts peak power, 100 watts rms.

Power ranges 200mW, 2.0W, 20W, 200W Accuracy: 1.5% of reading (± 2 digits) Power Supply: 220volts / 50 Hz; ±10%

Accessories: Pair of test lead

03. Characteristic PET, MOSPET & UJT

Mains Supply

: AC 90V-230V, 50Hz

DC Fixed Power Supply

: -5V, +15V, +35V

DC Variable Power Supply :1.5V to 14 V

1.5V to 34V

Voltmeter

: 0-200V

Ammeter

: 0-200mA

Bread Board

Dimension (mm)

: 175 x 61 x 10

Distribution strips
Distribution holes

: 2

Terminal Strips

: 200

Terminal holes

: 1 : 640

Resistor Bank

: M.F.R. 100E 1W (3 Nos.)

M.F.R. 470E 1W (3 Nos.)

M.F.R. 1K 1W(3 Nos.)

Variable Resistances

: 5 K Ω Ten turn Potentiometer (1 No.)

10 $\mathrm{K}\Omega$ Ten turn Potentiometer (1 No.)

5 KΩSingle turn Potentiometer (1 No.)

Fuse

: 500 mA, slow blow

Dimensions (mm)

: 350 x D 280 x H 55



04. Multiplexer and Demultiplexer Trainer

Input : +5V DC

Logic levels +5V : HIGH (Logic 1) 0V : LOW (Logic 0)

Dimensions (mm) : W 240 x D 345 x H 110 Weight : 1kg (approximate)

LED Indication : LED will ON (glow) for 1 state and will be OFF for 0 state

05. Flip-Flop Demonstrator

Input : +5V DC

Logic levels +5V : HIGH (Logic 1) 0V : LOW (Logic 0) Dimensions (mm) : W 240 x

D 345 x H 110

Weight : 1kg (approximate)

06. Experimentation with Astable and Monostable Multivibrator

Mains Supply : 230V ±10%, 50Hz DC Bias

Voltage : +5V Frequency of Trigger : 1KHz

Pulse Generator Frequency Range : 600 Hz - 3.2 KHz (approximate) of Astable Multivibrator Frequency Range : 350 Hz - 1 KHz (approximate) of Bistable Multivibrator

Output Voltage : 5V (approximate) pp
Dimensions (mm) : W 250 x D 150 x H 80
Weight : 550gms (approximate)

07. Experimentation With Rectifiers

Transformer Rating : 9V center tapped (300mA) approximate

Half wave Rectifier output : +4V DC approximate
Centre-Trapped Rectifier : +8V DC approximate
Bridge Rectifier Output : +8V DC approximate

Filter : LC

Type Load : Resistive 220W, 0.5W Mains Supply : $230V \pm 10\%$, 50Hz Dimensions (mm) : $W 250 \times D 150 \times H 80$

08. Transmission Line Trainer

Transmission Line : Coxial cable 100m (25m x 4)

Impedance Matching Resistances: 0-100ohm, 2 Nos.

Test Generators : Sine wave 40KHz-400KHz (Low Range)

Square wave : 400KHz-4MHz
Test Points : More than 10
Interconnections : 2/4 mm socket

Cabinet : Enclosed in ABS plastic cabinet with detachable cover

Power : 220V AC , 50/60 Hz mains operated

Accessories : Mains cord, Set of patch cords Manual, BNC-BNC Cable,

BNC-Crocodile Cable



09 . Antenna Training System:

Waveforms

: Sine

RF Generator

: 750 MHz approximately (output adjustable)

Tone Generator

: 1 KHz approximately (output adjustable)

Directional Coupler

: Forward & Reverse (selectable)

Matching Stub

: Slider type

Antenna Rotation

: 0-360 deg. Resolution 1 deg.

Receiving Antenna **Detector Display**

: Folded dipole with reflector

Interconnections

: Level adjustable meter : 2 mm Banana sockets

Power Supply

: 230 V, ±10% 50/60 Hz

Power Consumption

: 3 VA approximately 0

Operating Conditions

: 0-40 C, 80% RH

Weight

: 3 Kg approximately

Dimensions (mm)

: W 385 x D 75 x H 285

10.Drill machine

Power

AC (210-230)V, 50 Hz.

Rated input power

600 W

No-load speed, 1st gear

0 - 2,600 rpm

Power output

360 W

Weight

1.7 kg

Rated torque

20.0 Nm

Drill spindle connecting thread

1/2"-20 UNF

Chuck capacity, min./max.

1.5 - 13 mm

11. Soldering Iron

Power Source

AC (210-230)V, 50 Hz.

Wattage

50 Watts

Special Feature

Portable

Included Components

Soldering Iron Tips

12. De-soldering Pump

- · Compact size
- Easy one-handed use, anti-slip handle bar, comfortable holding feel.
- Built in tip for easy replacement
- high suction force and easy to remove solder, has a removable teflon tip for easy cleaning.

13. Hot Soldering Gun

Power Source: AC (210-230)V, 50 Hz.

Soldering temperature range: 200-500 °C (392~932 °F)

Unit Packing Size: 300*280*230(mm)

Body weight: 1.88 KG.

Body + handle weight: 2.26KG.



14. Digital multimeter

Maximum Display: 1999

Range Control : Manual Range

DC Voltage : (200mV to 600V) or better AC Votage : (100Vto 600V) or better

DC Resistance : 200 Ohm to 20Mega Ohm or better

15. Soldering station

Display Type Digital
Material Plastic
Cord Length 1 m or better

Temperature Range 80 DegreeC ~ 480 DegreeC

Adjustable Temperature Yes Capacity 90 W

In-built Digital Calibration for ISO 9000 : Yes

Weight 2.6 Kg Approx.

Included item: Power & Control Unit, Soldering Pencil, Soldering tip, Soldering Pencil

Holder, Cleaning Sponge & User Manual.

16. Digital RF Power Meter

Frequency Range HF,VHF full band & UHF

Display Type LCD Digital
Usage/Application Laboratory

Material metal
Display Digital

Frequency 1.6 to 525 MHz

LCD Type yes

Storage Temperature 60 degree c

17. Digital AF Output Meter

Wattage Range: upto 500W.F. S. D.: 50mW, 500mW, 5W, 50W & 500WDecibel Range: +10dB to +67dB(0 dB = 1m W into 600 ohmsImpedance discreet): 4, 8, 16, 600 Ohms. Load Selection: INT / EXT.Rating: For internal loads, 1% precision resistors are provided with continuous rating at half the peak load and intermitted rating at peak loads. Power Accuracy: +2 dB at 1 KHz Impedance Accuracy: +3% at 1 KHz +5% from 20 Hz to 20 KHz.

Frequency range : 20 Hz to 20 KHz Frequency Response : + 2 dB Power Supply : 230 V, + 10% 50 Hz

18. Digital AM/FM Standard Signal Generator:

Frequency range : 100KHz to 110MHz Fundamental : 100 KHz to 55 MHz Second Harmonic : 55 Mhz to 110MHz

AM oscillator

Frequency range continuously variable over the whole range with coarse & fine frequency control.

- (a) 100 KHz 250KHz(b) 250 KHz 700KHz
- (c) 700KHz 1.5 MHz
- (d) 1.5 MHz 5 MHz
- (e) 5 MHz 15 MHz
- (f) 15MHz 25 MHz
- (g) 25MHz 55MHz

Modulation frequency - 400Hz (nominal)

Modulation depth: (a) Internal Modulation 30% (b) External Modulation adjustable.

Output Amplitude: 100 mVpeak to peak + 2 dB in to 75 ohm

FM Oscillator : -Frequency Range

- (a) 3 MHz 10 MHz
- (b) 10 MHz 25 MHz
- (c) 25MHz 55 MHz

50 MHz - 110 MHz second harmonic of the 25 MHz to 55 MHz band.

Modulation frequency: 400 (nominal) frequency Deviation

Internal - Adjustable from 0 to greater than 22.5 KHz from 25 MHz to 55 MHz

Output Amplitude 75mV p-p + 2 dB in to 75 Ohm.

Attenuation (for AM/FM): - step attenuator and variable attenuator.

Frequency Display: Readout LED Display - 4 digit seven segment or better.

19. Automatic Photostats (Xerox) and Scanner machine

Technology : Laser (Dry Toner Powder)
Functions : Copier, Printer, Color Scanner

Printing Colour : Mono/ Black
Printing Size Max : Post Card To A3

Print Speed in A4 PPM : 25 Print Resolutions (DPI): 600

PC Connectivity: USB wire, LAN, Pen drive. WIFI Optional

Paper weight Min /Max GSM: 52 to 300

Memory Ram: 2 GB Hard Disk: 64GB (eMMC)

Duplex Print: Yes Duplex Scan DADF: No

Tray (Sheets): 2 X 500 (2X 500 Optional)

Bypass (Sheet): 1 X 100

Power Consumption in Watt: Approx. 1,500W

Trolley: Optional

Dimension (W X D X H) CM: 57 X 70X 88 Machine Weight: Approx.: Approx. 65 kg

Cartridge Capacity (C-EXV 63) (@5% Coverage Area in A4): Black- 30000 Prints.

Drum Cartridge Life: 100000 Prints



20. Cathode Ray Oscilloscope:

Dual Trace Dual Channel Oscilloscope with Component Test Facility

Bandwidth: 30MHz

Full bandwidth sweeping circuit is used in the sweeping system

The flexible and convenient triggering mode has the functions for selecting signals from one channel or triggered by Ext signals

ALT trigger to observe signals from two irrelative channels

The instrument has the functions of TV-H / TV-V synchronization and trigger-lock to observe all kinds of signals stably

From the terminal for trigger input, CH1 and CH2 signals can be output along with the triggering channel to connect the Ext frequency counter

Y deflection operation: Y1, Y2, ALT, CHOP, ADD, mode X-Y

Vertical Deflection: 5mV/Div to 20V/Div in factor 1-2-5 sequence in 12 steps

Rising time: < 18nS

Maximum Input Voltage: 400V (DC +ACp-p)
Triggering Source: Y1, Y2, ALT, POWER, EXT
Trigger Coupling: AC/DC (EXT), NORM/TV-H, TV-V
Horizontal Sweep Mode: AUTO, TRIG, LOCK, SINGLE

Sweep time factor: 0.1uS/div to 0.2s/div in 1-2-5 sequence in 20 steps

Magnification: x10

X-Y Mode input: X-Axis YI and Y-Axis Y2 Z Axis minimum input level: TTL Level

Component Test Facility

Calibration Signal: Square wave of 0.5V at 1kHz

CTR Display size: 8cm x 10cm

21. Desktop Computer 11 Gen all accessories.

LCD/TFT Monitor

15.6 Inches

Hard Disk Size

1 TB

CPU

Core i 7

RAM

16 GB Size or better

Operating System

Windows 11 Home

Special Feature

Fingerprint Reader, Backlit Keyboard

- 22. Computer Table (Dimension: 4 feet x 2 feet)
- 23. Computer Chair with adjustable height
- 24. LAN Cable (CAT 6)
- 25. LAN Port (Face Plate, Gang Box)
- 26. LAN Caching
- 27. Switch Rack 9U with power strip and cable
- 28. CAT 6 patch cords (2.5 meter)
- 29. Patch Panel 24 port



- 30. 24 port L2 Switch
- 31. Sound proofing of Morse Lab at Signal Training Centre(PTC).
- 32. Dual Seater Wooden Desk for Class Room with (Size: 2 ft x 4 ft)
- 33. Re-laying of Morse lab:

Cable interconnection with Casing Capping from Morse Code Processor at Instructor's stable to 20 nos. of Dual Seater Class Room Desk arranged in 04 Column with 05 rows. Each Dual Seater Class Room Desk fitted with 02 nos. of Slave Unit on both side of Desk . Each Slave Unit shall have 3.5 mm socket for input from Morse Key & Audio Output Jack (3.5 mm) for headphone with all the necessary switches .

34. Morse code processor (MCP):

Type: Micro Controller based

Memory: Total 1,28,000 Characters, divided over 16 files of 8000 characters each or better

Display : 16 x2 Alphanumeric with back light Keyboard : 101 keys,Standard PC compatible

Com Port: USB/RS 232 compatible with PC serial Port

Facilities: Formatting, Deleting, Editing, Sending, Receiving etc.

Upoloading & Downloading files to & from PC

Creating, Editing Saving of files on PC using editors on PC & downloading these files to

Morse Code Processor(MCP).

Speed :1 to 39 Word per Minute(WPM)
Relay Output : Provided for Auto Keying
Audio O/P : Headphone & Speaker

Morse Key I/P: provided

Power source: both DC: 12V & AC: (110-230)V, 50 Hz.

Operating Temperature: 0 to 50 Degree

35. Speaker:

Size : (H = 20 cm, W = 15 cm, B = 15 cm) Approx.

O/P : 10 Watt or better Impedance : 4 Ohm to 10 Ohm

Control Knob : Volume Control, Bass & Treble

Switch : ON/OFF Switch

36. Class room Morse Oscillators:

Size : (L=29 cm, B= 25 cm, H= 10 cm) Approx.

Inbuilt Speaker : 200 mW RMS or better

Connector : Morse Key lead connector

Power Source : Both AC : 210V -230V & DC: 12V

Audio O/P Socket: 3.5 mm Switch: ON/OFF Power Switch

37. Morse Key (Material: Brass)



38. Head Gear Assembly:

Type: Over the Head Self-Adjusting Headband with Closed-back around-ear

Audio channel

: Stereo

Connectivity

: Wired

Control

: Volume Control

Cable type & Length

: Tangle free cable with 1.4 meter or better

Headphone Jack

: 3.5 mm Jack Headphones placement : Over both Ear wit Ear Cup with complete isolation from external noise to ear.

Frequency Range

: 100Hz - 10kHz

Noise Control

: Active Noise Cancelling

DEED OF AGREEMENT

This agreement is made on	between the	hereinafter called the
FIRST PARTY (which term includes their authorize	d representative)	and the Governor of Arunachal
Pradesh, represented by the Supdt. Police(Telecom)	on hehalf of Dire	ctor Coporal of Aruna shall be de-
having his office at Itanagar, 791113, District Papum	Dara harsinafter	ctor General of Arunachai Pradesh
includes his successors assigneds executors and h	- Fare neremarter	called the SECOND PARTY (which
includes his successors, assignees, executors and V	WHEREAS SECOND	PARTY has placed the order for
supply of vide	runachal Pradesh	Police Headquarters Supply order
Nodatedand the FIRST F	PARTY has accepte	d the said supply order.

Terms and Conditions -

- 1. The FIRST PARTY agrees to supply the items within 90 days from the date of receipt of Supply Order.
- That the FIRST PARTY agrees that in the event of failure, declining, neglecting or delaying intentionally to comply with the terms and conditions of Agreement, the SECOND PARTY will be at liberty to cancel the supply order and forfeit the security deposit and initiate legal proceedings.
- 3. A sum equivalent to 0.5% of the delivery price of the delayed items for each week delay or part thereof beyond the original contract delivery period will be recovered by SECOND PARTY up to a maximum of 10% as Liquidated Damages.
- 5. The SECOND PARTY agrees to release the performance security to FIRST PARTY after 02(two) months from the end of Warranty period obtaining satisfactory reports indicating that no manufacturing defects or variation from approved sample have been detected.
- 6. The FIRST PARTY agrees to supplyat the location mentioned in the supply order without any additional cost , cess , road taxes etc.
- 7. The FIRST PARTY shall submit the bills along with delivery Challan within a period of 15 days from the date of delivery of the items.
- 8. The FIRST PARTY agrees to provide warranty of minimum 02 years on items which will be supplied to the SECOND PARTY from the date of Acceptance of Stores by government nominated verification committee (except for the consumable items).
- 9. In case of any disputes ,arbitration shall be held in District Session Court,Yupia(Arunachal Pradesh) or such other place as the DGP (A.P) at his discretion may determine and conduct in accordance with the provision of arbitration and conciliation Act,1996 or any statutory modification or re-enactment thereof. In this clause , the expression DGP Arunachal Pradesh includes if thereby DGP is on leave or absent from duty or is not available for any reason whatsoever , the officer who is looking after the current duties of DGP Arunachal Pradesh whether in addition to other function or otherwise .

Superintendent of Police (Telecom) Chimpu Itanagar Arunachal Pradesh

Name of Firm
Postal Address
E-mail & Contact No.