



### JAMMU & KASHMIR SRINAGAR.

Phone/Fax No: 0194-2443031/ 2443032 (<u>PROVISION SECTION</u>) 0191 3459029/2459255(Jammu)

(Sgr)Website:www.jkpolice.gov.in Emaiphqjk@jkpolice.gov.in)

## Gist of e-tender notice No3 of 2019 Dated: - 16. 06. 2019

For and on behalf of the Governor of Jammu and Kashmir State, e-tenders are hereby invited from registered OEM's or their authorized dealers to quote against this e-tender for Supply of Communication items/accessories as mentioned in Annexure "A" of this tender notice. The download of the NIT shall start on 26/06/2019 from 1600 hours. Tenders shall be submitted online on J&K State e-Procurement Portal <a href="www.iktenders.gov.in">www.iktenders.gov.in</a> upto 27.07.2019 before 1800 hours. The tenders (technical bids only) will be opened online on 29.07.2019 at 1100 hours at Police Headquarters J&K Peerbagh Srinagar. In case of unforeseen circumstances, the date of opening will be next working day.

A pre bid conference shall be held at PHQ J&K Peerbagh Srinagar on 10. 07.2019 at 1630 hours, intending firms can participate in this conference to clarify any issue related to instant tender enquiry.

Detailed tender documents (SBD) with terms and conditions are available on J&K State e-procurement Portal <a href="www.jktenders.gov.in">www.jktenders.gov.in</a>. The intending tenderers may visit this portal site for detailed information.

Mubassir Latifi JKPS (AIG Provision/Transport)
Director Concret of Police

For Director General of Police,

J&K-Srinagar Dated: 26

.06.2019

No: - Prov-II /WPR- 01/2019-20/ 37834-44

Copy to the:-

- 1. Principal Secretary to Govt. Home Department J&K Srinagar
- 2. All ADsGPJ&K
- 3. All IsGPJ&K....for favour of information.
- 4. DIG CKR Srinagar/DIG Jammu-Kathua & Samba Range Jammu.
- 5. Director Police Telecom J&K Srinagar for information.
- 6. Director Industries Jammu/Srinagar for information.
- 7. FA/Chief Accounts officer PHQ J&K Srinagar for information
- 8. Manager Government Press Srinagar / Jammu for publication of the e.tender in Govt Gazette.
- 9. SSP J&K CID Cell, 11 Harish Chander Mathur Lane Kasturba Gandhi Marg New Delhi-110001 along with copy of the e.tender for information intending firms.

10. AIG Communication PHQ J&K Srinagar for information with the request to arrange publication of Gist of the e.tender in 02 leading State dailies and 01 national daily through information department.

11. In-Charge IT Centre PHQ/In-Charge e-tendering PHQ for placing the e-tender on the

website of J&K Police and J&K Govt. Portal.

Mubassir Latifi JKPS

(AIG Provision/Transport)

For Director General of Police,

J&K-Srinagar



POLICE

**HEADQUARTERS** 

(Provision Section)

(Sgr)Website:www.jkpolice.gov.in Email: phqjk@jkpolice.gov.in

J&K.

Phone/Fax No: 0194-2443031/ 2443032 0191-2459029/2459255(Jammu)

# E-tender notice No 36 of 2019 Dated: **36**. 06. 2019

**SBD** 

SRINAGAR.

1. For and on behalf of the Governor J&K State, e-tenders are hereby invited from registered OEM's or their authorized dealers to quote against this e-tender for Supply of Communication items /accessories as mentioned in Annexure "A" of this tender notice. The tender notice consisting of qualifying information, eligibility criteria, specifications, bill of quantities (BOQ), set of terms and conditions of the contract and other details can be seen/ downloaded from J&K State e-procurement portal <a href="https://www.iktenders.gov.in">www.iktenders.gov.in</a> from 26,06.2019 from 1600 hours to 27 .07.2019 up to 1800 hours.

A pre bid conference shall be held at PHQ J&K Peerbagh Srinagar on 10.07.2019 at 1630 hours, intending firms can participate in this conference to clarify any issue related to instant tender enquiry.

<u>Note</u>: Only those firms should respond the tender enquiry which are reputed solutions and are capable to execute the supply/installation within shortest possible time to be specified in the purchase order.

2.	Time/date and place	On <b>29</b> .07 .2019 at 1100 hours at J&K
discharge and an annual an	for online opening of technical bid only	Police Headquarters, Peerbagh Srinagar.
	Validity of tender offer	Upto 31.12.2020

3. All tender documents attached with this invitation to tender including the specifications are SACROSANCT for considering any offer as complete offer. It is important that scanned copies of each page of the tender document duly completed, page numbered and signed are uploaded with your offer in a sequential manner and not haphazardly.

- 4. The tender fee has been fixed Rs 100/- only for SSI units of J&K State and all other vendors have to pay Rs. 2000/- in the shape of scanned copy of Treasury Challan deposited into State Govt. Treasury under object head 0055-Police & the same is non refundable. Treasury Challan should compulsorily mentioned (i) Name of Firm (ii) Tender No (iii) Date of opening of tender. However, the Govt/ Semi Govt. concerns of the J&K State claiming exemption of tender fee shall append authenticated orders, certificates etc. issued by competent authority in support of their claim. However, granting exemption from furnishing of Tender fee shall be at the sole discretion of DGP J&K Police or any officer authorized on his behalf. Tenders without stipulated tender fee shall be rejected. However, outside state bidders where J&K govt. Treasury is not available can furnish non refundable DD on account of tender fee.
- 5. Earnest Money Deposit (EMD):- Tender must be accompanied by a scanned copy of the Earnest Money for Rs 5000.00 in respect of SSI Unit holder of J&K State only and Rs 1,00,000/- (one lakh) for other tenderers who are not SSI Units of J&K State duly pledged to AIG (Prov/Tpt) PHQ J&K without which tender will not be considered. The amount shall deposited in the shape of Call Deposit Receipt Valid at call/FDR/Bank Guarantee of any Nationalized Bank valid for a period of one year. However, all the participating bidders would upload scanned copy of the requisite EMD with the tender. The Earnest Money will be released to unsuccessful tenderer within one month of the final acceptance of the tender whereas in case of successful tender original EMD shall be obtained before awarding the contract & it will be treated as part of security deposit. No interest shall be payable by purchaser on the EMD deposited by the tenderer. The original CDR/FDR/TDR/BG shall be sent by post by the successful bidder to the AIG Provision & Transport c/o DGP J&K before award of contract in pursuance to J&K Govt. Finance Department order issued under No OM No A/24(2017)/651 dated 7.6.2018.

The Address is as under :-

PHQ J&K Peer Bagh Srinagar (from May to October)

PHQ J&K Gulshan Ground Jammu (from November to April

J&K Govt. rules with regard to furnishing of EMD in respect of local Registered SSI units of J&K State shall be applicable in letter and spirit. Tenders without EMD shall be rejected.

6.	iii)Approximate completion time	Within 45 days from the date of issuance of supply order.	
	v)Inspection authority / place of survey	Survey of the items shall be conducted by the survey board constituted by PHQ J&K.	
	vii)Payment terms	Payment shall be released by the department after delivery, installation & Survey of the Video Walls by the board.	
7.	Rates quoted by the taxes/duties/charges if	firms should be on firm price basis ie including all fany.	
8.	i. If approved supplier backs out or fails to execute the supply order after placement of order within stipulated delivery period, the department will be at liberty to get the supplies executed from L-2 firm and differential amount between L-1 & L-2 rates will be recovered from the security deposit furnished by the approved supplier and remaining amount will be recovered from L-1 firm besides invoking other penalties which shall include black-listing of the firm etc.		
9.		cate different taxes, duties, charges which they propose rmat of Bill of quantity (BOQ) available with the e-tender.	
10.	Conditional tender will not be accepted /entertained. It will be summarily rejected.		
11.	Department reserves the right to change the quantity of sites as mentioned in the tender.		
12.	Department reserves the right to get the executing capacity of all the firms reverified/checked irrespective of the registration status or any other document / information.		
13.	Department reserves the right to cancel/reject or scrap the tender, with no consequential liability		
14.	TWO BID SYSTEM:- All bidders are required to submit their offers in two covers online as under:- (A) FIRST COVER (Technical Bid) is to be uploaded Online and scanned copies in PDF format should contain the following documents:-  i. Tender documents (viz technical compliance, registration/existence certificates of the firms / SSI Units & performance etc.) duly page numbered completed and signed BUT WITHOUT INDICATING THE		
	RATES QUOTED.  ii. All pages of the technical bid/pre-qualification documents must be clearly page marked at the bottom centre of each page before		

	scanning the same and uploaded to e-tendering portal.						
	iii.	Duplicate documents /pages shall not be uploaded by the bidders					
	iv.	Documents to be scanned ,converted to PDF format and subsequently uploaded to the portal must be scanned at 200 DPI(Dots per inch) resolution/scale.					
	V.	Tender fee and EMD documents must be scanned and placed in separate PDF files.					
	vi.	Bidders are advised not to upload any irrelevant /un-necessary documents on tender portal.					
	vii.	Scan copy of the NIT, all pages duly signed & stamped by the tenderer, in token of having understood and accepted the specifications, terms & conditions of the NIT.					
	viii.	Self attested copies of Income tax returns for the last 02 years					
	ix.	Charted Accountant duly vetted financial statements comprising of P 2 LA/C balance sheet for the last 02 years latest GST return.					
	X.	Performance statement for last two financial years as APPENDIX-III of this NIT.					
	xi.	Turn over for last two financial years as APPENDIX-III of this NIT					
	xii.						
	xiii.	Acceptance regarding execution of supplies within the stipulated time frame.					
	xiv.	PAN no/GST/TIN No. Self-attested photocopies thereof be appended.					
	xv.	Check list for tenders as per APPENDIX-IV of this NIT.					
	xvi.	Any other relevant document which the firms wishes to submit					
15.	i. Rate quoted by the firm should be on firm price basis as per Quantities (BOQ) of the e-tender to be downloaded from the webs Rates should be carefully quoted offline and then uploaded.(Rate shall be final. The Zero basic cost quoted for any item in BOQ treated as Nil Quoted						
		Rates quoted shall be final till the validity of the contract i.e. upto 31.12.2020 with provision of further extension if finally approved by competent authority.					
16.	On due date of opening of tenders i.e .07.2019 at 1100 hours, technical bid only shall be opened and technical evaluation process shall start. Those who qualify the technical bid on a/c documents uploaded by them shall be informed online with regard to opening of financial bids of the technically qualified firms. The evaluation committee can call the participating firms for demo of the offered items at any stage.						

offered items at any stage.

- 17. Security Deposit: The approved tenderer will have to furnish security deposit @ 5% of the total value in the shape of CDR/FDR valid for one year issued by a Nationalized/Scheduled Banks pledged to AIG Provision & Transport PHQ J&K Srinagar, at the time of signing of Deed of Agreement to ensure satisfactory performance of the contract, warranty period/agreed contract. The charges on stamps etc. (cost of documents in totality) shall be borne by the supplier while executing the agreement. (No interest shall be paid by the department on the Security deposit). J&K Govt rules for Security Deposit in respect of local SSI Units shall be applicable
- 18. Guarantee/Warranty
  Except as otherwise provided in the invitation to the tender, the approved supplier hereby declares that supplied items shall be in all respects strictly as per RFP/requirement of the department. The approved supplier hereby guarantees the warranty of the supplies equipment for a period of 02 years & accessories for a period of 01 year from date of survey /acceptance.
- 19. Liquidity Damages

  Successful tenderer shall have to complete the execution of supply, installation/commissioning of items wherever necessary within stipulated period as would be mentioned in the supply order. J&K Police at its discretion reserves the right to impose liquidity damages of 5% of the cost of un-supplied material if the supplies are not executed/installation is not completed in stipulated time frame. However, ample opportunity would be given to the approved supplier to explain the cause of delay in the execution of supplies.
- 20. As soon as the acceptance of the tender is communicated to the successful tenderers online, the contract shall be binding on him. The earnest money of the tenderer who backs out or withdraw his tender or fails to abide by it after acceptance thereof is communicated/posted to him shall be forfeited besides other penal remedies that may be available to the Govt. of the J&K under the law for the time being in force in the State of J&K.
- 21. The successful tenderer shall have to enter into an agreement on prescribed proforma (immediately after the issue of supply order) with the Department for due performance of the contract which shall be invariably furnished before the supply is made.
- The tenderer are required to furnish an authenticated copy of latest GST return. The PHQ shall be at liberty to put to scrutiny, verification etc. the GST clearance so furnished by the successful tenderer.
- The authorities reserve absolute powers to reject or accept any tender or part thereof without assigning any reason and without any legal obligations. Any clause incorporated in the tender (not conforming to the NIT in any manner) shall make such an offer liable for rejection. Therefore, all the terms and conditions of the tender Notice including technical specifications shall be carefully studied for the sake of complete and comprehensive tender. Failure to comply with any of the conditions stipulated in the tender or instructions or the

	offer with insufficient particulars/documents shall lead to out-right rejection of the tender offer.
24.	If after the registration/placement of orders/execution of the agreement and formally depositing the security money, in case the tenderer backs out or fails to execute the work, the security deposited will be forfeited besides imposing any other penal provisions as the department may decide to invoke.
25.	The formal deed incorporating the terms of the contract will be executed by the successful tenderer immediately after receipt of supply order. Failure to execute such bond/deed shall not however prevent the contract from being enforced against the tenderer. Any loss sustained by the Govt. as a result of re-tendering the contract shall be recovered from the defaulter, besides other penal provisions as the department may decide.
26.	If at any stage of the tender process two or more bidders are found in collusion between /among themselves with the intent to reduce competition, set price, share technical expertise ,share business information /decision ,control/share production and or distribution of products and raise prices ,all such tenders shall be out rightly rejected.
27.	If at any stage of tender process any bidder/s is/are found influencing any Government Servant associated with or handling the tender process and supplies thereof, bid of such tenderer/s shall be rejected besides invoking penal action under rules.
28.	All legal proceedings arising out of any dispute between the parties shall have to be settled in the Courts situated in Srinagar and Jammu and not elsewhere
29.	The supplier shall not sublet the contract or any part thereof to any other agency
30.	The Department reserves the right to add or suitably modify the terms and conditions (without prior notification) as per exigencies and hence above shall not be construed as all inclusive.
31.	Bidders submitting their bids on-line shall only be accepted and manual bids shall be rejected and no document other than mentioned in the NIT shall be accepted manually.
32.	PHQ may call any bidder at any stage of the tendering process for seeking any clarification.
33.	The bidder should furnish an undertaking APPENDIX-II of this NIT stating that he /she is not connected in any manner with any other bidder in this tender with respect to manufacturing ,distribution, supply, in sharing business information/documents price of the item etc. for the items quoted in this bid and has not been blacklisted by any Central /State Governments. If this is found to be incorrect, his/her tender would be liable to be rejected without any further notice.
34.	The detailed NIT, SBD and BOQ are available on J&K State e-Procurement portal <a href="https://www.jktenders.gov.in">www.jktenders.gov.in</a> .

35.	The rates approved by this Hqrs in terms of this tender notice shall not be used as rate contract by other Government department.
36.	The approved supplier has to ensure the reasonability of rates quoted by the firm. If at any stage it is found that firm has charged lesser rates of the same items as are supplied to J&K Police from any other organization or State/Central Govt. organizations, suitable action under rules shall be taken against approved supplier and excess amount charged from J&K Police shall be recovered.

Mubassir Latifi

(AIG Provision/Transport)

For Director General of Police,

J&K-Srinagar

### APPENDIX-I

### MANUFACTURER'S AUTHORIZATION LETTER/CERTIFICATE;

1 (	0,
Tŀ	ne Director General of Police
J8	kK, Jammu/Srinagar.
Sι	ıbject:
Si	r,
	Please refer to your e-tender enquiry (NIT) Notof 2019 dated 606.2019.
1.	We who are proven and reputable Manufacturers of (name and description of the goods offered in the tender) having factories at hereby authorize M/s (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender enquiry documents for the above said goods manufactured by us.
2.	We also hereby extend our full warranty, CMS, support as per the conditions of contract, read with modifications, if any, in the special conditions of contract for the goods and services offered for supply by the above firm against this tender enquiry document.
	Yours faithfully,
	Signature with date, name and designation
	For and on behalf of M/s
	(Name and address of the Manufacturers)
No	ote;-

- This letter should be on the letter head of the manufacturing firm and should be a. signed by the person who is competent having the power of attorney.
- b. Scan copy of the original letter must be attached with tender documents.

SIGNATURE OF THE TENDERER.

### **APPENDIX-II**

Reference e.NIT No 36 of 2019 dated-26.06.2019.
To,
The Director General of Police J&K, Jammu/Srinagar.
Sir,
1. I hereby state that I am not connected in any manner with any other bidder in this tender in sharing business information/documents and price quoted in this bid.
2. I further state that if this is found to be correct, the police department is at liberty to reject my tender.
3. I further certify that my concern has neither blacklisted nor banned by any central or state organizations to participate in tendering process.
Yours faithfully,
Signature with date, name and designation
For and on behalf of M/s
(Name and address of the tenderer)
Note;-

a. This undertaking should be on the letter head of the tenderer firm and should be signed by the authorized person.b. Scan copy of the original letter must be attached with tender documents.

### APPENDIX-III

### Performance statement for last two years

Name of the firm	
Description of work	 
executed	
Quantity on order	
Value	
Original execution period	
<b>F</b> • • • • • • • • • • • • • • • • • • •	
Whether executed in	
stipulated time frame or other wise	
Extension sought for final	
execution	
Reasons for delay in	
execution ( if any)	
Past performance in %	
age upto1 / 2 crores for	
last two financial years	
Turnover for last 02	
years in % age above 2 crores	

Signature of Tenderer

### **APPENDIX-IV**

### General instructions/CHECK LIST FOR TENDERERS;

Before submission of tender documents, the tenderers should check whether they have complied with the following requirements or otherwise:-

<u>S.No</u>	Requirement to be checked before submission of the tender	Complied (Please indicate YES or NO after complying with the requirement.
1.	The tenderers for their own ease shall fill in relevant details of NIT offline & upload the same after ensuring accuracy	
2.	Whether tender fee scan copy is enclosed, with the technical bid?	
3.	Whether Earnest Money Deposit (EMD) scan copy is enclosed with the technical bid?	
4.	If an SSI Unit of J&K State, the same is indicated in the tender and scan copy of the valid registration/functional certificate is enclosed or not?	
5.	Whether scanned copies of complete tender documents are up-loaded in the technical bid duly signed having official seal on all pages or not. However, the quoted items may be also be ticked?	
6.	Whether tender documents are submitted in two bid system i.e. Technical and Financial Bids separately as per tender enquiry or not?	
7.	Whether offer validity as required in tender enquiry is accepted and indicated in your tender document or not?	
8.	Whether terms of execution required in tender enquiry is accepted and indicated in your tender document or not?	
9.	Whether payment terms as required in the tender enquiry is accepted and indicated in your tender document or not?	
10.	Whether performance statement for last 2 financial years as required in tender enquiry in the format is enclosed or not. If not, reason thereof is given?	
11.	Whether warranty period as asked in the tender enquiry is accepted or not?	
12.	Whether maintenance conditions of the lease line during warranty /post warranty is accepted	
13.	If called for T.E. whether free training about usage of lease	

	line is accepted or not?	
14.	Whether indicated in the tender document, if your firm's business dealings is banned by any Govt/Private agency or recommended for blacklisting or not?	
15.	The complete commercial quote should be in Indian Rupees only. Currency of price should be clearly mentioned (wherever applicable).	
16.	Tenderers are required to indicate Basic Rate, +GST in the relevant columns of the BOQ.	
17.	Tenderer will attach justification of price quoted which should include the recently executed contracts with Govt/Semi Govt Organizations etc.	
18.	No column should be left blank. Wherever amount is not quoted, the column should be clearly marked as 'Nil".	
19.	Whether authorization certificate of the OEM (in case of authorized dealer) has been uploaded or not?	
20.	Valid registration certificate of approved dealer with central/state sales tax department for the items quoted	
21.	Latest GST return	
22.	SSI unit -registration certificate (local SSI units of J&K State only	
23.	Whether copy of Copy of latest Income tax return has been uploaded.	
24.	Govt. supply orders for same if any available have been uploaded or not	
25.	Whether OEM registration certificate has been uploaded or not?	
26.	Whether other documents as asked in the SBD have been uploaded	

### Annexure A of e-tender No 36 of 2019 dated 26.06.2019

## Item No. 01. Automatic Voltage Regulators with Isolation Transformer 05 KV. (70 to 270 Volt Qty 10 No

(Sample to be deposited in Police Central Store Jammu)

Specifications:-

AVR (Static) with isolation Transformer

Capacity: -

05 KVA single phase

Type: -

Control Circuitry based on Micro controlled and fully

solid state power stage. No Moving Part in Power Stage.

I/P Voltage: -

70-270 Volts

Frequency: - Wave form: -

50 Hz sine wave

Material to be used for isolation Transformer: -

High Grade Copper

O/P Voltage: -

220 Volts± 5% Single Phase

Correction speed: -

100 Volts per second

Response time: -

Within 100 m. seconds

Output points: 
Maximum O/P current: -

Minimum 03 outlets

Technology to be used: -

1.5 times the rated current for 01 minute at nominal condition Fully solid state power thyristors for switching thyristors

Protections:-

i. Input under / over voltage as per correction speed

li. Output under/ over voltage as per correction speed

lii. Output over load

lv. Output short circuit

V. Current sensing protection for each triac individual protection

through electronic current limit circuit.

Vi. Automatic Start at normal input voltage

**Control:**- The power device used for controlling will be switched On/ Off at voltage / Current zero cross over ,so that generation for spikes / surges can be avoided.

By Pass:- Provision of suitable auto/Manual service by pass in case of any malfunction of the unit

Metering: -

LCD meter for input and output status of Voltage / Current

Indication: -

Mains, Out Put, Load, Fault (Alarm)

Type of cooling: -

Air cooled through fan

Insulation Resistance: -

Better than 300 Mega ohms

Leakage current: -

5m Amps

## Item No. 02 DOT MATRIX PRINTER 136 Column 24 pin Qty 06 No Specification

Brand

Reputed

Printing method

Serial impact Dot Matrix

Number of columns
Print Head type

136 column 24 wires

Ribbon

Cartridge, Black

Printer head life

200 million strokes per wire or more

Operating Voltage

220 V AC

Character sizes

All except superscript subscript 3.1mm high

Printing direction

Bidirectional for text printing Unidirectional for graphics

Line spacing

1/6 –inches, or programmable in increments of 1/216th of an inch

Number of copies

One original plus two copies

Paper Path Standard

Top, Rear, and

Interface Ribbor ife Parallel /RS 232 Serial/USB 2.0 30 million characters or higher

**Compatible Operating Systems** 

Windows XP,7,8,10, etc

## Item No. 03 Battery pack of ICOM IC F3 Hand held set. Qty 50 NO Technical Specifications

i. Ampere hour capacity.

2000 mAh or more

ii. Terminal Voltage

9.6 volts Dc with +Ve & -Ve indication.

iii. Container

strong & rugged

iv. Self Discharge

very low very low Li-Polymer or Li-ion or Ni-mh

v. chemistry vi. Warranty

Of ... as estationers

vi. Warranty 01 year minimum

## Item No. 04 Co-axial Cable (thick) 30 meters long rolls fitted with PL 259 plugs. (Sample of one feet required) Qty 55 rolls

### Technical specifications

Generic Name Flex Type Impedance RG 217 Flexible 50 Ohm PE

Dielectric type Jacket Material No. of Shields

PVC 2

Max. Operating temperature Centre conductor

-35 °C to +80 °C Solid Copper

Inner conductor, No. of Strands

Multi No.

Type

Coax

## Item No. 05 Feeder 75 ohm thin (in Mtrs) (Sample of one feet required) Qty 1500 meters

### Technical specifications

Flex Type

Flexible

Impedance Dielectric type 75 Ohm PE

Jacket Material No. of Shields

PVC

Max. Operating temperature

-35 °C to +80 °C

Centre conductor

Solid Copper Multi No.

Inner conductor, No. of Strands Type

Multi No

Item No. 06 Duplex Radio with self supporting mast /tower height as per requirement Qty 12 No( Technical Specifications)

S.N.	Parameter Specifications					
1	Frequency Band	Radio Should Support 2.4/5.8 /6/11/18 GHz frequency band or unlicensed				
			frequency band as per WPC Notification No G.S.R. 1048€ dated 18.10.2018			
2	Encryption	AES-128, FIPS197				
3	Capacity	(i) 25net ag	(i) 25net aggregate or higher			
4	Modulation	2x2 MIMO-	OFDM, BPSK, QPSK, 16QAM, 64QAM			
5	TX Out put	21 dBm or				
6	Rx Sensitivity	-88dBm @	13 Mbps, -86dBm @ 26Mbps or better			
7	RF Channels	7 overlappi	ng channels in frequency band 2.4/5.8/6/11/18 GHz in 5/10/20/40 MHz			
			dth configuration option as per user requirement or better.			
8	Channel Bandwidth		port user configurable 5/10/20/40 MHz channel bandwidth. The Radios			
			support 40Mhz channel bandwidth to address high capacity backhaul			
			ats in PTP Radio Links			
9	Wireless Error	Should sup	port FEC 1/2, 2/3, 3/4, 5/6 10			
10	correction	1007 1	1			
10	ODU enclosure	IP67 or bet				
11	Ethernet ports		port minimum 02 ports			
12	Diversity		n and Spatial Diversity supported			
13	Topology	Point to poi				
14	Through put		https or better (same ODU must be software scalable upto 50 Mbps)			
15	Security	Mac level a	authentication / link Lock			
Opera			[FIL (DOF)			
<u>1</u>	Operating Modes		Ethernet (POE)			
3	VLAN Support		Required			
4	Asymmetrical TDD		Should Support Asymmetric Bandwidth			
5	Link Distance	in hards	20 Kms or better			
6	Spectrum Analyzer (	in pair)	Link-oriented Spectrum Analyzer: should show the results of both sites			
7	Duplex Technology Redundancy		TDD			
1	Redundancy		Should have provision for 1+1 configuration in all respects with automatic switchover of Transmitter and Receiver for Radio link redundancy in less than			
			50 milli seconds in case of any failure via Ethernet Switch.			
Netwo	ork Management and	Security	1 30 mini seconds in case of any famore via Eulemet Switch.			
1	1 Network Support	ocounty	Ethernet, support should be available			
2	Antenna Alignment t	ools	Buzzer / Visual LED's ( SNR)			
3	Management utilities		SNMP Based/ Local and remote Loop back testing			
4	Management interface		Ethernet			
5	5 Network managem		Should support SNMP			
6	Upgrade capabilities		Should have facility to upgrade the software over the Air. Should support			
-	-1-9 takasındo		software backup and Restore through EMS			
Physic	cal Environmental an	d compliance				
1	1 Network Connection		Ethernet (POE)			
2	External Antenna Connection		N Type Connector with weather proof cover			
3	POE Adopter		IDU to provide power over Cat 6 cable to ODU			
4	Power consumption		Less than 35 Watts (IDU + ODU)			
5	LED Indicators		Power and line			
6	Temperature		-35 to + 60°C or above (ODU)			
7	Enclosure		All weather casing for ODU			
8	Environmental Compliance		MIL-STD 810 C /D/ E/ F/ IEC 60068-2 or JSS-55555			
9	Shock and Vibration		MIL-STD 810 C /D/ E/F/ EN 300019-2-4 IEC 60068-2 Class- 4 M5 or JSS-			

S.N.	Parameter Specifications			
1	Frequency Band	Radio Should Support 2.4/5.8 /6/11/18 GHz frequency band or unlicensed		
	· · · · · · · · · · · · · · · · · · ·	frequency band as per WPC Notification No G.S.R. 1048€ dated 18.10.2018		
2	Encryption	AES-128, FIPS197		
3	Capacity	(i) 25net ag	gregate or higher	
4	Modulation	2x2 MIMO-	OFDM, BPSK, QPSK, 16QAM, 64QAM	
5	TX Out put	21 dBm or l	petter	
6	Rx Sensitivity	-88dBm @	13 Mbps, -86dBm @ 26Mbps or better	
7	RF Channels	7 overlappi	ng channels in frequency band 2.4/5.8/6/11/18 GHz in 5/10/20/40 MHz	
			Ith configuration option as per user requirement or better.	
8	Channel Bandwidth		port user configurable 5/10/20/40 MHz channel bandwidth. The Radios	
			support 40Mhz channel bandwidth to address high capacity backhaul	
			ts in PTP Radio Links	
9	Wireless Error	Should sup	port FEC 1/2, 2/3, 3/4, 5/6 10	
40	correction			
10	ODU enclosure	IP67 or bet		
11	Ethernet ports		port minimum 02 ports	
12	Diversity	+	and Spatial Diversity supported	
13	Topology	Point to poi	· · · · · · · · · · · · · · · · · · ·	
14	Through put		lbps or better (same ODU must be software scalable upto 50 Mbps)	
15	Security	Mac level a	uthentication / link Lock	
	ational			
1	Operating Modes		Ethernet (POE)	
2	VLAN Support	· · · · · · · · · · · · · · · · · ·	Required	
3	Asymmetrical TDD		Should Support Asymmetric Bandwidth	
4	Link Distance		20 Kms or better	
5	Spectrum Analyzer (	in built)	Link-oriented Spectrum Analyzer: should show the results of both sites	
6	Duplex Technology		TDD	
7	Redundancy		Should have provision for 1+1 configuration in all respects with automatic	
			switchover of Transmitter and Receiver for Radio link redundancy in less than	
<u> </u>			50 milli seconds in case of any failure via Ethernet Switch.	
	ork Management and S	Security		
1	1 Network Support	1	Ethernet, support should be available	
2	Antenna Alignment to		Buzzer / Visual LED's (SNR)	
3	Management utilities	<del></del>	SNMP Based/ Local and remote Loop back testing	
4	Management interfac		Ethernet CNMP	
5	5 Network managem		Should support SNMP	
6	Upgrade capabilities		Should have facility to upgrade the software over the Air. Should support	
Db'	lool Environmental are	d aamul!	software backup and Restore through EMS	
	ical Environmental and		<u> </u>	
1	1 Network Connection		Ethernet (POE)	
2	External Antenna Co	HITECTION	N Type Connector with weather proof cover	
3	POE Adopter		IDU to provide power over Cat 6 cable to ODU	
4	Power consumption		Less than 35 Watts ( IDU + ODU)	
5	LED Indicators		Power and line	
6	Temperature		-35 to + 60°C or above (ODU)	
7	Enclosure		All weather casing for ODU	
8	Environmental Compliance		MIL-STD 810 C /D/ E/ F/ IEC 60068-2 or JSS-55555	
9	Shock and Vibration		MIL-STD 810 C /D/ E/F/ EN 300019-2-4 IEC 60068-2 Class- 4 M5 or JSS-	

-

		Answer supervision, Disconnect supervision
		One-stage dialing and two-stage dialing
b	VoIP call feature	Call waiting, Call transfer, Call hold, Call forward
Other	r Characteristics	
а	Voice feature	(i)DTMF
		(ii) Voice call
<u>b</u>	Characteristics of data interface	Support DHCP Client
С	Configuration	Through WEB browser, TELNET
d	FAX	Support pass through, T.30 and T.38
e	Power	AC 220V, 50HZ
f	Switch	1 Reset Switch
Hard	ware requirement for PTP per Statio	n
01	PTP Duplex Radio with POE	0.1
02	08 ports switch	01
03	4+4 port FXO/FXS Gateway	01
04	Cat 6 cable as per requirement	As per requirement
05	Surge Protector	01
06	External Antenna 26dBi or better	02
07	Self supporting Mast for Duplex Radio	Complete Height as per requirement
Additi	onal Features:-	
1	Equipment should have support for integration with DMR Dispatch system.	
2	Equipment should be compatible with existing DMR Radios.	
3	Equipment should have four extending/linking PSTN lines	
4	The OEM should have service Centres in India	
5	Self-supporting tower alongwith concrete base , Earthing, lighting arrestor, Aviation lamp and he	
	requirement at each site	and the state of t
6	Concrete base of the tower should be constructed by vendor.	

### Item No. 07 Routers 2900 Series

### **Qty 06 NO**

### **Router Specifications**

- 1. 3 Integrated 10/100/1000 Ethernet ports with 1 port capable of RJ-45 or SFP connectivity
- 2. 1 service module slot
- 3. 4 Enhanced High-Speed WAN Interface Card (EHWIC) slots
- 4. 3 onboard digital signal processor slots
- 5. 1 internal service module slot for application services
- 6. Fully integrated power distribution to modules supporting 802.3af Power over Ethernet (PoE) and Cisco Enhanced PoE

### Security

- Embedded hardware-accelerated VPN encryption
- Secure collaborative communications with Group Encrypted Transport VPN, Dynamic Multipoint VPN, or Enhanced Easy VPN
- Integrated threat control using Cisco IOS Firewall, Cisco IOS Zone-Based Firewall, Cisco IOS IPS, and Cisco IOS Content Filtering
- 4. Identity management: Intelligently protecting endpoints using authentication, authorization, and accounting (AAA), and public key infrastructure

### Voice

- 1. High-density packet voice DSP module, optimized for voice and video support
- 2. Standards-certified VoiceXML browser services
- 3. Cisco Unified Border Element capabilities
- 4. Cisco Unity Express voicemail support

Support for Cisco Communications Manager Express and Survivable Remote Site Telephony

## Item No. 08 V101 Kits.(Sample to be deposited in Police Central Store Jammu ) Qty 20 No

### Technical specification of

- The Aerial kit should be made of heavy duty light weight material to with stand high velocity winds and weather conditions, each hallow tube should be of six feet length fitted with necessary hooks for guy wire.
- 2. Maximum dia of the base tube should be about 03 inches and other four tubes should be of such dia which can be
  - adjusted with another tube in such a way that all the tubes remain erected.
- 3. It should have standard quality of nylon guy wire for installation along with other installation material like ½ kg Hammer and iron pegs.
- 4. The height of Ariel should be at least 30 feet adjustable.
- 5. All the material should be supplied in a good quality canvas bag with man pack carrying belts

### Item No. 09 Meggar (Earthing Tester).

Oty 02 No

### **Technical specification**

### General

31/2 digit LCD display

Max Reading 1999.

Earth Resistance Range:

 $20\Omega$ , 200 Ω & 2000Ω.

Earth Voltage Measurement

upto 200V

Power Source

Rechargeable Internal Ni-MH/Li-ion/Li-Polymer Battery.

Soil Resistivity and Earth Resistance Measurement

3 / 4 Pole Earth Resistance Measurement

Type tested as per IS-9223.

### Standard Accessories

Instruction Manual

**Battery Charger** 

### Item No. 10 Complete Morse Code Processor Kits 10 NO

Rate	o. 11 Model Training Kit	t for Bit Error Qty 01	
Techni S.No	ical specification Parameters	Specifications	
1	Supported Bit RATE	0.5-12.5Gb/sec or better	
2	Error Detector Range	0.5-12.5Gb/sec or better	
3	Data Inputs		
	Sensitivity		
	a) single ended	100mVp-p	
	<ul><li>b) Differential</li><li>c) I/p Voltage Swing</li></ul>	50mVp-p	
	d) PRBS patterns	2Vp-p	
	<ul><li>e) RAM patterns -User defined</li></ul>	7, 11, 15, 20, 23, 31	
	f) Synchronization	128 bits to 512 Mb, 1-bit increments	
		Pattern Matching and Manual	
4	Data Outputs		
	Pattems	7, 11, 15, 20, 23, 31	
	RAM patterns	128 bits to 512 Mbits total with support for 128 pattern sequencer states Bit Mode and Protocol aware mode	
	Pattern Modes		
	Error Insertion Length	1, 2, 4, 8, 16, 32, 64 bit bursts	
5	Error Detector Measurements	BER, Bits Received, Re-syncs, Measured Pattern Generator and Error Detector Clock Frequencies	
6	Phase Noise	< –90 dBc/Hz at 10 kHz offset (typical) or better	
7	DATA clock waveform performance	25 ps max, 23 ps typical (10-90%), 1 V amplitude	
8	Jitter	<500 fs RMS Random Jitter (@10.3125 Gb/s), typical	
9 10	Clock/Data delay Trigger Output	Above 1.1.GHz -3nsec Divided Clock mode and Pattern mode	
11	Ref Input	10 MHz, 100 MHz, 106.25 MHz, 133.33 MHz, 156.25 MHz,	

166.67 MHz, or 200 MHz

12 Error Location Analysis To debug the errors precisely, locations of errors correlate to

user-set correlation lengths like block size, system timescales

measured in bits.

13 Built – In Operating System

Win7 Or Better with In-Built Hard disk to Store data

14 Interface

LAN ,USB ,GPIB

Note: - The firm must be An ISO 9001:2008 certified Company or Equivalent (Certificate required)

## Item No. 12 Model Training Kit for Optical Fiber Communication System 01 No

### **Technical specification**

**Transmitter:** 1 No. Fiber Optic LED, Wavelength 660 nm

**Receiver:** 1 No. Fiber Optic Photo detector

Modulation Techniques : AM, FM, PWM

**Drivers:** 1 No. with Analog & Digital modes **Clock:** Crystal controlled Clock 4.096 MHz

PLL Detector: 1 No.
AC Amplifier: 1 No.
Comparator: 1 No.

Filter: 1 No. 4th order Butterworth, 3.4 KHz cut-off frequency

Analog Band Width: 350 KHz Digital Bandwidth: 2.5 MHz

Function Generator: 1 KHz Sine wave (Amplitude adjustable)

1 KHz Square wave (TTL)

Clock Generator: 64 KHz/128 KHz/256 KHz (TTL)

Data Generator: 15 Bit

Noise Generator: Variable level

Bit Error Counter: Minimum 4 digits, 7 segment display

**Voice Link:** F. O. voice link using microphone & speaker (built in)

Switched Faults: 8 No's in TX and RX

Fiber Optic Cable: Standard SMA Connector type

Cable Type : Step indexed multimode PMMA plastic cable

Core Refractive Index : 1.492

Clad Refractive Index: 1.406
Numerical Aperture: Better than 0.5
Acceptance Angle: Better than 60 deg.

Fiber Diameter:

Outer Diameter:

Fiber Length:

Test Points:

Inter connections:

1000 microns
2.2 mm
0.5 m & 1 m
34 No's.
2 mm sockets

Weight: Not more than 2Kgs
Operating conditions: 0-40 °C, 80% RH

Power Supply: 110-220 V, ±10%, 50/60 Hz Power Consumption: Not more than 10 watts.

Accessories: Measuring Jig, Mandrel, Fiber cables, Microphone, Headphone, Patch cords etc

Note:- The offered instrument must be An ISO 9001:2008 certified Company or Equivalent standard

### Features:-

- Simplex Analog and Digital Trans-receiver
- ii. 660 nm channel with Transmitter & Receiver

iii. AM-FM-PWM modulation / demodulation

iv. On board Function Generator

v. On board Clock & Data Generator

vi. On board Bit Error Counter

vii. Crystal controlled Clock

viii. Functional blocks indicated on-board mimic ix. Input-output & test points provided on board

x. On board voice link

xi. Built in DC Power Supply

xii. Numerical Aperture measurement jig and mandrel for bending loss measurement

xiii. Switched faults on Transmitter & Receiver

### The trainer kit must be capable of performing the following experiments:-

Experiment 1: Study of 650 nm Fiber Optic Analog link.

Experiment 2: Study of 650 nm Fiber Optic Digital Link.

Experiment 3: To obtain Intensity Modulation of the Analog Signal & Demodulation Experiment 4: To obtain Intensity Modulation of the Digital Signal & Demodulation

Experiment 5: Study of Frequency Modulation (FM) Experiment 6: Study of Pulse Width Modulation

Experiment 7: Measurement of Propagation or Attenuation Loss in the optical fiber

Experiment 8: Study of Bending Loss

Experiment 9: Measurement of Optical Power using optical power meter Experiment 10:Measurement of Propagation Loss in optical fiber using POM Experiment 11:Measurement of Numerical Aperture (NA) of optical fiber

Experiment 12:Study of Characteristics of E-O converter using optical power meter

Experiment 13:Study of Characteristics of Fiber Optic Communication Link

Experiment 14: Study of Voice Communication through fiber Optic cable using Amplitude Modulation

Experiment 15: Demonstration of Voice Transmission through optical fiber using FM

Experiment 16: Study of Voice Transmission through optical fiber using PWM

Experiment 17:Study of the effects of Switched Fault Number 1 & 8 on Amplitude Modulation System

Experiment 18:Study of the effects of Switched Fault Number 4, 5 & 7 in FM System

Experiment 19:Study of the effects of Switched Fault Number 2, 3 & 6 on Pulse Width Modulation System

Experiment 20:Determination of Bit Rate supported by the fiber optic link

Experiment 21:Determination of Sensitivity of the fiber optic link

Experiment 22:Determination of Power Margin (Power Budget)

Experiment 23: V-I characteristics of Photo LED

Experiment 24: V-I characteristics of Photo Detector

Experiment 25:To Measure Bit Error Rate

Experiment 26: Study and Observation of Eye Pattern

## Item No. 13 Model Trainer Kit for microwave communication test set:- Qty 01 No

## Technical Specification Beam Supply

Voltage:

240 - 420 VDC, Variable

Current:

50 mA

Regulation:

0.5 % for 10% I/P variation

Ripple:

< 5m Vrms

Repeller Supply:

-18V to -270V DC Variable

Regulation:

0.25%, for 10% I/P variation

Filament Supply:

6.3 VDC (adjustable on rear panel)

**Over-Load Trip Current:** 

65mA

Modulation:

AM (Square) FM (Saw-tooth)

Frequency Range:

 $180-1450 \text{ HZ} \pm 5\%$ ,  $72-195 \text{ Hz} \pm 5\%$ 

Amplitude:

0-110 Vpp 0-40 Vpp

External:

Through External Modulating Signal

Display:

Digital display for 1. Beam voltage 2. Beam Current 3. Repeller voltage

Modulation Selector: FM/AM/CW/Ext

3 ½ Digital Panel Meter:

2V

Meter Selector:

Beam Voltage (V)/ Current (I)/ Rep. (Repeller)

Connectors:

a. 5-Pin connector

b. BNC for External Modulation

Power Supply:

230 V AC ± 10%, 50Hz

**SWR Meter:** 

LCD

Display : Sensitivity :

0.1μV for 200Ω input impedance

Noise Level:

Less than 0.02µV

Range:

0 - 60dB in 10dB steps

Input:
Display Select:

Un-biased low and high impedance crystal biased crystal (200  $\Omega$  &200K)

SWR 1 – 9

dB 0 - 10

Modes:

Normal Audio

PC (for Gunn based bench)

**Gain Control:** 

Adjusts the reference level, variable range 0-10dB (approximately)

Input Connector:

BNC (F)

Input Frequency:

1000Hz ± 10%

Power:

230 Volts AC ± 10%, 50Hz

Note:- The firm must be An ISO 9001:2008 certified Company or Equivalent standard

The trainer kit must be capable of performing the following experiments:-

**Experiment 1:** Study of the characteristics of Klystron Tube and to determine its electronic tuning range **Experiment 2:** To determine the frequency & wavelength in a rectangular wave-guide working mode

Experiment 3: To determine the Standing Wave-Ratio and Reflection Coefficient

Experiment 4: To measure an unknown Impedance with Smith chart

**Experiment 5: Study of Attenuator** 

**Experiment 6:** To study the substitution method for attenuation measurement & determine the attenuation due to a component under test

**Experiment 7:** Study the voice communication by using microwave test bench.

Microwave

Microwave Test Bench (Klystron Based):-

Communication

Test Bench

**Technical Specification:** 

Klystron power supply

: Voltage 240-420 VDC variable

Current: 50 mA

Regulation: 0.5 % for 10 % I/P variation.

Ripple: < 5 mV rms on load.

Repeller supply

Beam supply

: - 18V to -270 V DC Variable on load.

Regulation: 0.25 for 10 % input variation.

Filament supply

: 6.3 VDC (adjustable on rear panel)

Overload Trip

: 65 mA.

Modulation

: AM(square)FM (sawtooth)

Frequency range

: 500-2000 Hz ,50-150 Hz

Amplitude

: 0-110 Vpp ,0-60 Vpp.

External

: Through external modulating signal

Display

: Digital display for

1) Beam voltage 2) Beam current 3) Repeller voltage.

Modulation selector

: CW/AM/FM/EXT.

3 ½ Digit panel meter : 2V

Meter selector

: Beam voltage/current/repeller.

Connector

: a) 8-pin octal socket b) BNC for external Mod.

Power Supply

: 220 V AC ±10%, 50 Hz.

Audio Input

: Mic Jack for audio communication

### VSWR Meter

Display

: 16 x 2 Characters LCD

Sensitivity

: 0.1 mV for 200 ohms input impedance

Noise Level

: Less than 0.02 mV

Range

: 0 - 60 dB in 10 dB steps

Input

: Un-biased low and high impedance biased crystal

(200 ohms and 200 K)

Display Select : SWR 1 - 9dB 0 - 10

Modes

: Normal

Audio

**PC-Interface** 

**Gain Control** 

: Adjusts the reference level, variable range 0 -10 dB (approx)

Input Connector: BNC (F)

Input Frequency: 1000 Hz ± 10% **Power Supply** : 220 V± 10%, 50Hz

### Klystron Based Bench (X Band) Consists of Following:-

**Solid State Klystron** 

1

**Power Supply digital** 

Klystron Mount with 1 Klystron tube 2K25/2K27 1 Isolator 1

Frequency Meter Digital

With LCD Display

Variable Attenuator 1 Slotted Section 1 : Tunable Probe 1 **Detector Mount** 1 Movable Short 1 Fixed Short 1 **Matched Termination** 1 Digital VSWR Meter with : 1
Back lit LCD display
Wave Guide Stand : 4

S.S. Tuner : 1

**Accessories:** 

Cooling Fan : 1
BNC cable : 2
Microphone : 1
Experiment Manual : 1
Wall chart with pictures : 1

& Formulas of Microwave

### Item No. 14 Technical Specifications of Telephone Apparatus Single Push (Reputed Brands only) (Sample Must) Qty 260 No

A.C Impedance 600 ohms

Power Supply: Telephone line Dialing Pulse, Tone

Pulse Dialing Speed: 10+ /- 0.5 PPS

M/B Ratio 2:1

IDP 800 + /- 80 ms

Tone Dialing parameters:

Frequency: As per CCITT Standard
Redial: Last Number up to 32 digits

PABX Control: Adjustable Flash Timing 297 ms or 640 ms

Pause: 2.2 seconds for dialing on PABX

Pause: 2.2 seconds for draining on FABA

Operating Environment: Indoor

Application: To be used with PABX system. Independent

access of exchange line.

i. Auto music on hold.

ii. Do not disturb option.

iii. Call / privacy.

iv. Make of Reputed

### Item No. 15 Online UPS 01 KVA

Qty 65 No

Technical specification (Branded Item need to be quoted)

Capacity 1000 VA
 Output wattage 700 Watts

3. Input voltage 140 V A.C to 270 V A.C 50 Hz

4. Wave form Pure Sine Wave
5. Output Voltage 220 V (A.C) 50 Hz

6. Protection Under voltage/ Over Voltage, Serge Control, Short

7. Circuit Protection on Output Circuit, Inverter Shutdown

Protection.

8. Indication

Audio Visual for different conditions of UPS

9. Battery Backup

Battery Backup for 30 minutes.

#### Note:-

The UPS should be having required number of reputed make batteries for at least 30 minutes backup along with all accessories and mounting rack to make it a complete ups system.

## Item No. 16 Mini Telephone Exchanges O3 NO Technical Specifications of 16 line intercom telephone exchange (EPABX)

No. of trunk Lines

3 or more

No. of Extensions

16 or more

Brand

Reputed.

**Power Supply** 

SMPS type

Input AC

90V to 260V

Extension Loop Resistance

Less than 600 Ohms

**Ambient Temperature** 

+5°C to +45°C

**Ambient Humidity** 

95% Maximum

**Telephone Sets** 

Pulse or DTMF dialing Phones

Cabling

2 Core from every Telephone set to the PBX

**Battery Backup** 

For atleast for 30 minutes with inbuilt charging facility

Warranty

On site comprehensive at least for one year

### Features:-

- \* Music On Hold
- \* Caller ID Call Transfer.
- \* Call Hold & Busy transfer
- \* Call Parking
- \* Call Pick-up form any Extension
- \* CO line Group Conference
- \* Last number redial
- \* Outgoing Local/ STD/ ISD
- \* Call Restriction
- \* Day/Night Mode
- \* and other Many More Features.....

Mubassir Latifi JKPS

(AIG Provision/Transport)

For Director General of Police.

J&K-Srinagar