

**DIRECTORATE OF POLICE  
COMMUNICATION & TECHNICAL SERVICES,  
HIMACHAL PRADESH, SHIMLA-2.**

**Tender Notice/Document**

**Tender Enquiry No. CTS/MPF(PURCHASE)19-20 - 479**

**Dated 09/01/2020**

Sealed tenders are invited from manufacturers or authorized dealers/distributor of OEM under two bid systems i.e. technical bid & financial bid for the purchase of 03 Nos. RF Link Equipment.

1. Bid Submission date = On or before 21/01/2020 upto 1:00 PM.
2. Bid Opening date = 21/01/2020 at 03:00 PM.
3. Tender Document Cost: = Rs. 3,00/-

**TECHNICAL SPECIFICATIONS – AS PER ANNEXURE-A**

**Terms and Conditions**

1. Tender document must be enclosed in properly sealed envelope addressed to the Superintendent of Police, Communication & Technical Services, Himachal Pradesh, Shimla-171002 by designation not by name. The envelope containing tender documents should be marked on the top right, “**Tender for RF Link Equipment**”.
2. If bidder is not an OEM then bidder should be authorized by OEM for the offered equipments and bidder should provide authorization certificate from OEM.
3. In case offers are received both from manufacturer as well as from their agent, offers from manufacturers only shall be considered and offer from their agent shall be summarily rejected.
4. GST and any other applicable taxes be indicated separately otherwise rates will be deemed to be inclusive of such levies/taxes and no increase in duty/taxes will be allowed.
5. The tender shall be opened by the Departmental Purchase Committee in the presence of tenderers or their authorized representatives who may like to attend the proceedings.
6. All the firms shall be required to deposit tender fee Rs. 300/- in the shape of Bank Draft in the name of Superintendent of Police, Commn. & Tech. Services, HP, Shimla-2.
7. The tenderer shall submit declaration to the effect that the tenderer firm has not been black listed by any state or central Govt. / University / Bank / Corporation / Autonomous institute etc.
8. The tenderer shall submit undertaking of rates to the effect that the rates quoted are the lowest possible and the less rates have not been quoted to any other State/Center Government Organization/PSU under similar terms and conditions anywhere in India.
9. The bidder should have experience of supplying proposed or similar equipment to Govt./Semi Govt. Deptt., PSU etc. and submit copies of supply orders with tender document.

10. The tenderers should submit the tenders in Two-Bid systems (Technical Bid & Financial Bid).

The envelope containing technical bid shall contain the following documents:-

- a. This Tender document duly signed and stamped but without indicating the rates as a token that all terms and conditions are accepted.
- b. **Annexure –A** (i.e. compliance of Tech. Specs.) duly signed & stamped.
- c. Copy of bank draft on a/c of cost of tender document (Tender Fee).
- d. Authorization certificate of OEM.
- e. Copy of GST.
- f. Undertaking of rates.
- g. Declaration of non-black-listed firm.
- h. Product catalog/ brochure/leaflet of quoted model.
- i. Copy of Supply Order placed by any CAPF/Police organization/ PSU/Govt./Semi Govt. organization.

11. **All the documents duly signed/stamped as mentioned above must be attached in order of series.**

12. The envelope pertaining to financial bid should contain price bid as per **Annexure- B**.

13. Validity Period: - The Tender shall remain open for acceptance till 180 days from the date of opening of Tender and extendable for further period, if required.

14. Financial bids of only technically qualified tenderers shall be opened. Such short-listed bidders will be intimated about the date and time accordingly.

15. Rates and units shall not be over written. Rates shall always be written both in figures and words. The tenderer must sign all corrections.

16. The successful firm shall have to submit performance security deposit @ 7 % of the supply order in the shape of bank draft or fixed deposit receipts duly pledged in the name of Superintendent of Police, Commn. & Tech. Services, HP, Shimla-2. Performance Security shall remain valid for a period of sixty days from the date of delivery of equipment including warranty and guarantee period i.e. 14 months to the best of satisfaction of Procuring Department.

17. No tender will be considered unless and until all the documents are properly signed.

18. The rate should be quoted F.O.R. destination at Shimla.

19. Tender will be awarded taking into consideration the rate of the complete RF Link system including installation charges.

20. The supplier shall provide a warranty for one year minimum.

21. The bill will be submitted in triplicate. Payment will be made against physical delivery of accepted stores at consignee location/destination.

22. Items can be increased or decreased as per availability of funds.

23. The supply will be executed within 30 days from the issue of supply order.

24. The Performance security will be forfeited in case of failure of supply within stipulated period.
25. No payment will be made in advance for any supplies.
26. In case the firm does not complete the supply within the delivery period then liquidated damages charges will be imposed @ 2% per month subject to 10% maximum on total value of the items.
27. Prices should be quoted both in words as well as in figures.
28. The purchase committee reserves the right of rejection/approval of the tender without assigning any reasons thereto.
29. All disputes shall be settled in courts of competent jurisdiction situated in Shimla.

SD/-  
Superintendent of Police,  
Commn. & Tech. Services,  
HP, Shimla-2

**TECHNICAL SPECIFICATIONS OF BTS (BASE TERMINAL STATION) (RF LINK) WITH ITS COMPLIANCE STATEMENT TO BE GIVEN BY THE TENDERER**

<b>PARAMETER</b>	<b>TECH. SPECIFICATIONS</b>	<b>COMPLIANCE YES/NO</b>
<b>Standard</b>	IEEE 802.11n 2.4GHz and 5.0 GHz IEEE 802.11a 5.0 GHz IEEE 802.11 b/g.2.4 GHz IEEE 802.3,IEEE 802.3U,IEEE 802.3ab IEEE 802.3af/at Power over Ethernet (PoE) IEEE 802.11h Regulatory Domain Selection	
<b>Channel Bandwidth</b>	5/10/20/40 MHz(5 MHz steps)	
<b>Spectral efficiency</b>	>5 Bit/Hz/sec	
<b>Operation Mode</b>	PTMP.TDMA,WDS AP, WDS Client,AP	
<b>Antenna</b>	BTS Antennas(3 sectoral antennas to cover 360 degree	
<b>Frequency</b>	(US, Canada) 2.4 ~ 2.4835 GHz(ETSI, Japan)802.11 a/n:5.15~5.25 GHz (lower band) 5.25 ~ 5.35 GHz(middle band) 5.725~5.875 GHz (upper band)	
<b>Modulation</b>	OFDM(64-QAM,16-QAM,QPSK,BPSK)	
<b>TX Power</b>	0 to 29 dBm	
<b>Data Rate</b>	Upto 300 Mbps	
<b>Watch Dog Timer</b>	Yes	
<b>Security</b>	WEP 64/128-bits Wi-Fi Protected Access(WPA/WPA2) WPA/WPA2(PSK) over WDS HTTPs, Secure SSH, Telnet, SSL Remote management login Access Control list RADIUS authentication MAC address based filtering	
<b>RAS</b>	2x2 MIMO(802.11n) Special Diversity(802.11a)	
<b>Duplex Tech. Management</b>	TDD VLAN IEEE 802.1Q,802.1P,Diffserv, Qin Q Tagging/un Tagging Remote management via web based (HTML)GUI,HTTP,HTTPs Secure SSH Telnet, SSL, SNMP management v1/v2c/v3 configuration File backup and restore by TFTP or FTP,HTML remote firmware upgrade over the air Software RESET to factory default Search available remote	
<b>Signal Tool</b>	Wireless Signals and their strengths. Support Setting of optimum pointing direction of antenna. Graphic display of signal strength	
<b>Power</b>	100 or 240 VAC, 50-60 Hz or 802.3af PoE	

<b>Consumption</b>	12w	
<b>Operating Temp.</b>	-40 degree Celsius + 80 degree Celsius	
<b>Storage Humidity</b>	10 % -95 % (Non-condensing)	
<b>Interface</b>	10/100/1000 Base T RJ-45	
<b>Enclosure</b>	IP 67 ETA (WPC India) FCC, ETSI	
<b>Certification</b>	CE	

### TECHNICAL SPECIFICATIONS OF CPE (CUSTOMER POINT EQUIPMENT) (RF LINK)

<b>Standard</b>	IEEE 802.11n 2.4.GHz and 5.0 GHz IEEE 802.11a 5.o GHz IEEE 802,11 b/g.2.4 GHz IEEE 802.3,IEEE 802.3U,IEEE 802.3ab IEEE 802.3af/at Power over Ethernet(PoE) IEEE 802.11h Regulatory Domain Selection	
<b>Channel Bandwidth</b>	5/10/20/40 MHz(5 MHZ steps)	
<b>Spectral efficiency</b>	>5 Bit/Hz/sec	
<b>Operation Mode</b>	MESH,TDMA,WDS AP, WDS Client, AP	
<b>Antenna</b>	External directional antennas 802.11 g/n:2.4~2.4835	
<b>Frequency</b>	(US,Canada) 2.4 ~ 2.4835 GHz(ETSI, Japan)802.11 a/n:5.15~5.25 GHz (lower band) 5.25 ~ 5.35 GHz(middle band) 5.725~5.875 GHz (upper band)	
<b>Modulation</b>	OFDM(64-QAM,16-QAM,QPSK,BPSK	
<b>Tx power</b>	0 to 29 dBm	
<b>Data Rate</b>	Upto 300 Mbps	
<b>Watch Dog Timer</b>	Yes	
<b>Security</b>	WEP 64/128-bits Wi-Fi Protected Access(WPA/WPA2) WPA/WPA2(PSK) over WDS HTTPs, Secure SSH, Telnet, SSL Remote management login Access Control list RADIUS authentication MAC address based filtering	
<b>RAS</b>	2x2 MIMO(802.11n) Special Diversity(802.11a)	
<b>Duplex Tech. Management</b>	TDD VLAN IEEE 802.1Q,802.1P,Diffserv, Qin Q Tagging/un Tagging Remote management via web based (HTML)GUI,HTTP,HTTPs Secure SSH Telnet, SSL, SNMP management v1/v2c/v3 configuration File backup and restore by TFTP or FTP,HTML remote firmware upgrade over the air Software RESET to factory default ,Search available remote	
<b>Power</b>	100 or 240 VAC, 50-60 Hz or 802.3af PoE	
<b>Consumption</b>	12w	
<b>Operating Temp.</b>	-40 degree Celsius ~ + 80 degree Celsius	

<b>Storage Humidity</b>	10 % ~ 95 %(Non-condensing)	
<b>Interface</b>	10/100/1000 Base T RJ-45	
<b>Enclosure</b>	IP 67 ETA(WPC India) FCC,ETSI	
<b>Certification</b>	CE	

**Annexure- B**

**FINANCIAL BID FOR RF LINK**

**Tender Enquiry No. CTS/MPF(PURCHASE)19-20 -479**

**Dated 09/01/2020**

**Bidder Name:-**

S.N	Item Description	Qty. in Nos.	Per Unit cost inclusive of all taxes in Rs.	Total Cost
1.	Base Terminal Station (BTS) Equipment (without BTS Antenna)	01		
2.	BTS Sectoral Antenna to cover 120°	03		
3.	Customer Point Equipment (CPE) Equipment (inclusive of Antenna)	02		
4.	Installation Charges Per R.F. Link	03		

**Note:- L1 will be decided on the basis of consolidated rates of all four items offered by participated bidders.**

Sign & stamp of firm