

Bid Document

Bid Details	
Bid End Date/Time	18-07-2020 18:00:00
Bid Opening Date/Time	18-07-2020 18:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Ministry Of Micro Small And Medium Enterprises
Department Name	Na
Organisation Name	Fragrance And Flavour Development Centre (ffdc) Uttar Pradesh
Office Name	Kannauj Up
Total Quantity	3
Item Category	Outdoor Unlicensed Band RF Radio
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Bid to RA enabled	No
Inspection Required	No

EMD Detail

Required	No
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ePBG Detail

Required	No
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Splitting

Bid splitting not applied.

Outdoor Unlicensed Band RF Radio (3 pieces)

Technical Specifications

* As per GeM Category Specification

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
RADIO SPECIFICATIONS	GSR 38 (E) Unlicensed Frequency Band (MHz)	5825 - 5875	5825 - 5875
	PSK Modulation Supported : 1) BPSK 2) QPSK	In Compliance	*
	QAM Supported : 1) 16 QAM 2) 64 QAM	In Compliance	*
	256 QAM Supported	No	No
	Available Channel Bandwidth 1) 5 MHz 2) 10 MHz 3) 20 MHz 4) 40 MHz	In Compliance	*
	Integrated Antenna Gain (dBi)	18	*
	Integrated Antenna Azimuth (degree)	24	*
	Number of External Antenna Port	2	*
	MIMO Supported	2 x 2	2 x 2
	TX Power (dB)	19	*
	Rx Receiver Sensitivity in (dB)	-98	*
	Automatic Transmit Power Control Available	Yes	*
	Maximum Supported Link Distance with 36 dBm EIRP (Km)	5	*
	TDD Supported	Yes	*
	TDMA Supported	Yes	Yes
	OFDMA Supported	No	*
	Throughput (Mbps)	366	366.0 - 400.0 Or higher
	Configurable uplink throughput % of total product capacity	85	*
	Configurable downlink throughput % of total product capacity	85	*
	Spectral Efficiency (b/Hz)	6	*
	Quality of Service	Yes	Yes

according to IEEE 802 point 1p, TOS/ Diffserve		
GPS Synchronization Supported	No	No
Forward Error Correction Feature	Yes	*
LAN Interface 10/100/1000 Base T interface	Yes	*
MTU Size (Bytes)	1500	*
Framing/Coding IEEE802 pointy 3/U standard Compliance	Yes	*
SNMP Supported 1) v1 2) v2 3) v3	Yes	*
Local and Remote Management Supported	Yes	*
Management VLAN supported	Yes	*
VLAN Supported : 1) Trunking 2) Passthrough 3) Transparent 4) Q in Q (Double Tagging)	Yes	*
Encryption Method Supported	AES 128	*
DC 20 to 60 VDC Power supported	Yes	*
AC 110-240v AC Power supported	No	*
Radius Client Supported	Yes	*
NTP Client Supported	Yes	*
Number of CPE Supported	50	50.0 - 200.0 Or higher
Built-in Spectrum analyzer tool	Yes	*
Management by Telnet	Yes	*
Management by Web Interface	Yes	*
Radio is capable to support Dynamic Bandwidth Allocation/CIR	Yes	*

	Radio is capable to support NMS for Configuration and Monitoring	Yes	*
	IP v4 Compliant	Yes	*
	IP v6 Compliant	Yes	*
	Dual Stack IPv4 and IPv6 Compliant	Yes	Yes
	Power Consumption (Watt)	13	*
SAFETY AND PROTECTION	Safety Standard IEC/UL-60950-1 Compliance	Yes	*
	Safety Standard IEC/UL-60950-22 Compliance	Yes	*
	Ingress Protection Rating (IP)	66	66, 67 Or higher
	Lightening Protection Class and Standard	IEC 61000-4-2	*
OTHERS	Equipment Type Approval Certificate available from WPC (Certificate shall be furnished when demanded by buyer)	Yes	*
	Equipment Type Approval Certificate number and its validity	-	*
	Minimum Operating Temperature (Degree C)	-40	*
	Maximum Operating Temperature (Degree C)	70	*
	Minimum Operating Humidity (RH) (%)	90	*
	Dimensions (L xz B x H) (mm x mm x mm)	-	*
	Weight (grams)	1650	*
ACCESSORIES	Outdoor Twisted Pair Cable - 50 meter	Yes	*
	CAT 6 Cable shielding type UTP (Flame Retardant) - 50 meter	No	*
	CAT 6 Cable shielding type STP (Flame Retardant) - 50 meter	No	*

	LMR600 Cable Length - 1point 5 meter with connector both ends	Yes	*
	Surge Protection Unit	Yes	*
WARRANTY AND INSTALLATION	Installation and Site Survey is included in the scope of supply	Yes	*
	On Site OEM Warranty (Year)	5	5

* Specifications highlighted in bold are the Golden Parameters.

* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement (allowed Values) by the Buyer.

Additional Specification Documents

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Prabhaschandra Singh	209726,FRAGRANCE & FLAVOUR DEVELOPMENT CENTRE (FFDC), INDUSTRIAL ESTATE, G.T. ROAD, MAKRAND NAGAR	3	30

Bid Specific Additional Terms and Conditions

- 1. Upload Manufacturer authorization:** Wherever Authorised Distributors are submitting the bid, Manufacturers Authorisation Form (MAF)/Certificate with OEM details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the bid.
- 2. Scope of supply (Bid price to include all cost components) :** Supply Installation Testing and Commissioning of Goods
- 3. Bid reserved for Make In India products:** Procurement under this bid is reserved for purchase from Class 1 local suppliers as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a class 1 local supplier is denoted in the bid document 50%. All bidders must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which the bid is liable to be rejected. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020 . In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.
- 4. IMPORTED PRODUCTS:** In case of imported products, OEM or Authorized Seller of OEM should have a registered office in India to provide after sales service support in India. The certificate to this effect should be submitted.
- 5. Availability of Service Centres:** Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding,

successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.

6. Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.
7. Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.
8. Successful bidder will have to ensure that adequate number of dedicated technical service personals / engineers are designated / deployed for attending to the Service Request in a time bound manner and for ensuring Timely Servicing / rectification of defects during warranty period, as per Service level agreement indicated in the relevant clause of the bid.
9. Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 15 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG). Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imburse the cost of such service / rectification to the Buyer.

[This Bid is also governed by the General Terms and Conditions](#)

---Thank You---