

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
VIKRAM SARABHAI SPACE CENTRE (VSSC)  
THIRUVANANTHAPURAM**

## **Tender for WAVEGUIDE**

**Bids to be submitted online**

**Tender No.: VSSC/PURCHASE UNIT-IV (MVIT)/VS202400072601 dated 27-03-2024**

## **A. Tender Details**

Tender No : **VSSC/PURCHASE UNIT-IV (MVIT)/VS202400072601**

Tender Date : **27-03-2024**

Tender Classification: **GOODS**

Purchase Entity : **PURCHASE UNIT-IV (MVIT)**

Centre : **VIKRAM SARABHAI SPACE CENTRE (VSSC)**

## **WAVEGUIDE**

Please quote as per the following terms and conditions before the due date. Clarifications, if any shall be sought before the clarification date mentioned below. Last minute clarification on tender/extension of due date of tender will not be entertained.

Quotation/Open Authorization shall be submitted online [only] complying the specified schedule with technical specifications, including datasheets, pamphlets, catalogues etc.

If a vendor is not able to submit bid against this tender due to any reason, such vendor is requested to post their REGRET message in the e-procurement portal with clear reasons or email to [spso\\_mvrit\\_pur@vssc.gov.in](mailto:spso_mvrit_pur@vssc.gov.in). Non-submission of bids without regrets will be viewed seriously.

### **A.1 Tender Schedule**

Bid Submission Start Date : **27-03-2024 16:20**

Bid Clarification Due Date : **15-04-2024 14:22**

Bid Submission Due Date : **30-04-2024 14:22**

Bid Opening Date : **30-04-2024 14:35**

## **B. Tender Attachments**

NA

### **Instructions To Vendors**

#### **1. PROFORMA FOR INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER (IG)**

1. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.
  - (b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.
  - (c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.
  - (d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.
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2. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.
  - (b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.
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  - (d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

#### **3. ACCEPTANCE OF STORES:**

- (a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by

the purchaser at the Contractor's own risk, expense and cost.

(b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final.

(c) If, in the opinion of the purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.

(d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

4. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.

5. a) Your offer should be valid for 90 days from the date of opening of the tender.

b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.

6. **DESPATCH:** The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

7. d) The term "Purchase Order" shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

#### 8. **GUARANTEE & REPLACEMENT:**

(a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.

(b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called

upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty.

(c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

(d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.

(e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the Stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or any other period or as to whether the nature of defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) To fulfill guarantee conditions outlined in (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser)

**9. PACKING FORWARDING & INSURANCE:** The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

**10.** Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.

**11. PRICES:** Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

**12. REJECTED STORES:**

Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

**13.** Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes/duties.

14. SECURITY DEPOSIT: Wherever, the Purchase Order value is Rs. 5.00 Lakhs or more, on acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause regarding Delivery. (b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

## 15. TERMS & CONDITIONS OF TENDER

16. TEST CERTIFICATE: Wherever required, test certificates should be sent along with the despatch documents.

17. The authority of the person signing the tender, if called for, should be produced.

18. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.

19. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.

20. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.

21. The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of Stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.

22. The term Purchaser shall mean the President of India or his successors or assigns.

23. The term "Stores" shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

## 2. Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the Competent Authority.

Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

2. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws.

3. Validity of Registration: Registration should be valid at the time of submission of bids and should be valid at the time of placement of order.

3. Offers submitted without accepting our Tender conditions especially LD PBG Warranty and SD clauses shall be summarily rejected. GST as applicable will be paid extra. All Tax invoices shall invariably bear their GST Registration No, applicable GST rates and HSN code. In the absence of which the invoices shall not be processed for payment.

Note: "In line with Notification No. 01/2017-Central Tax (Rate) dated 28-06-2017, as amended by Notification No. 06/2018-Central Tax (Rate) dated 25-01-2018 and Notification No. 24/2018 Central Tax (Rate) dated 31-12-2018 and corresponding SGST Rate Notifications, GST rate for the goods at Sl. No. 243 B: "Scientific and technical instruments, apparatus, equipment, accessories, parts, components, spares, tools, mock up and modules, raw material and consumable required for Launch Vehicles and Satellites and Payloads" is 2.5% CGST and 2.5% SGST. IGST is charged at 5 % in terms of Notification No. 01/2017-IGST dated 28-06-2017 as amended by Notification No. 07/2018 IGST dated 25-01-2018 and Notification No. 25/2018 IGST dated 31-12-2018, necessary IGST/CGST/SGST certificate shall be issued".

For registering into PFMS you may please mention your Bank details such as IFSC code Account number also submit a copy of personalized cheque leaf or NEFT mandate form duly endorsed by the Bank along with quotation. If you had already submitted these details no need to submit again but please inform the same.

4. Please furnish the following

- a. Copy of valid manufacturing license of the agency certificate
- b. copy of latest filed tax returns
- c. Details of registration number, PAN Card, GST, TIN, NSIC, MSME registration , HSN code etc.
- d. The addresses registered site works, workshop, etc.
- e. Sub contracting details with address if permissible.

1) Foreign vendors are not allowed to quote against this Tender.

2) Only Class I and Class II Local suppliers as per Make in India Policy are eligible to participate in the bid subject to production of an undertaking regarding the following

a) The percentage of local content should be specifically mentioned in the offer, without which it shall

be summarily rejected.

b)Preference will be given to Class I Local supplier and in their absence, Class II Local Supplier will be considered.

c)Offers submitted without undertaking regarding Local content shall be summarily rejected

Also provide split up of local content details such as percentage (%) of direct material cost, labour cost, over head expenses etc involved in the item.



## C. Bid Templates

### C.1 Technical Bid - WAVEGUIDE

#### 1. WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide High Power Termination

##### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
3	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
4	VSWR	1.3:1 maximum	Yes / No / Explain		
5	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
6	Waveguide Size	WR187 Standard	Yes / No / Explain		
7	Flange	CPR187G	Yes / No / Explain		
8	Cooling	Natural Air Cooling	Yes / No / Explain		
9	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
10	Environment	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
11	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
12	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for flange.	Yes / No / Explain		

#### 2. WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide to Coaxial Adaptor

##### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide size	WR187 Standard	Yes / No / Explain		
4	Flange	CPR187G	Yes / No / Explain		
5	Average Power Handling	1 Watt or Higher	Yes / No / Explain		
6	Connector	N-type (Female)	Yes / No / Explain		
7	Insertion Loss	0.5 dB (maximum)	Yes / No / Explain		
8	VSWR	1.3:1 (maximum)	Yes / No / Explain		
9	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
10	Environmental	(0-40) Degree Celsius, Coastal Saline	Yes / No / Explain		
11	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for flange.	Yes / No / Explain		

### 3. WAVEGUIDE COMPONENTS /SECTIONS - 6" Straight WR187 Waveguide with mixed flange

#### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1	CPR187G	Yes / No / Explain		

5	Flange2	UG406 B/U or UG148 C/U or any part no. which is equivalent a WR187 circular choke flange with 8 holes	Yes / No / Explain		
6	Length	6-inch	Yes / No / Explain		
7	VSWR	1.3:1 (maximum)	Yes / No / Explain		
8	Insertion Loss	0.3 dB / meter (maximum)	Yes / No / Explain		
9	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
10	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
11	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
12	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
13	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
14	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

#### 4. WAVEGUIDE COMPONENTS /SECTIONS - 4" Straight WR187 waveguide with CPR187G flange

##### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation:	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR187G	Yes / No / Explain		

5	Length	4-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.3 dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

**5. WAVEGUIDE COMPONENTS /SECTIONS - 6” Straight WR187 waveguide with CPR187G flange**

**Item specifications for WAVEGUIDE COMPONENTS /SECTIONS**

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR187G	Yes / No / Explain		
5	Length	6-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.3dB / meter (maximum)	Yes / No / Explain		

8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

**6. WAVEGUIDE COMPONENTS /SECTIONS - 8” Straight WR187 waveguide with CPR187G flange**

**Item specifications for WAVEGUIDE COMPONENTS /SECTIONS**

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR187G	Yes / No / Explain		
5	Length	8-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.3dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		

10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 7. WAVEGUIDE COMPONENTS /SECTIONS - 12” Straight WR187 waveguide with CPR187G flange

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR187G	Yes / No / Explain		
5	Length	12-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.3dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		

12	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 8. WAVEGUIDE COMPONENTS /SECTIONS - 24" Straight WR187 waveguide with CPR187G flange

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR187G	Yes / No / Explain		
5	Length	24-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.3dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

**9. WAVEGUIDE COMPONENTS /SECTIONS - 40” Straight WR187 waveguide with CPR187G flange**

**Item specifications for WAVEGUIDE COMPONENTS /SECTIONS**

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR187G	Yes / No / Explain		
5	Length	40-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.3dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

**10. WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide E - Bend**

**Item specifications for WAVEGUIDE COMPONENTS /SECTIONS**



SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR187G	Yes / No / Explain		
5	Length	E - Bend	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.5 dB (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 11. WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide H - Bend

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		

3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR187G	Yes / No / Explain		
5	Type of Bend	H - Bend	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.5 dB (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 12. WAVEGUIDE COMPONENTS /SECTIONS - WR187 Pressure Window (Rectangular Flange)

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR187 Standard	Yes / No / Explain		
4	Flange	Rectangular Flange (CPR187G)	Yes / No / Explain		
5	VSWR	1.1:1 (Maximum)	Yes / No / Explain		

6	Window Material	Fiber Glass / Kapton Window / PTFE	Yes / No / Explain		
7	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
8	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		

### 13. WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide Pressure inlet with pressure gauge

#### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	5.4 - 5.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Flange1 & Flange2	CPR187G	Yes / No / Explain		
4	Length	6-inch	Yes / No / Explain		
5	VSWR	1.3:1 (maximum)	Yes / No / Explain		
6	Insertion Loss	0.5 dB (maximum)	Yes / No / Explain		
7	Peak Power Handling	1.5MW or higher	Yes / No / Explain		
8	Average Power Handling	1.5kW or higher	Yes / No / Explain		
9	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
10	Pressure	25 PSIG operating & 30 PSIG withstanding	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure Gauge	Calibrated up to 30 PSIG	Yes / No / Explain		

13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		
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#### 14. WAVEGUIDE COMPONENTS /SECTIONS - Gaskets for WR187 Choke flange

##### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Waveguide type	WR187 Standard	Yes / No / Explain		
2	Gasket Material	Silicone with conductive fillers	Yes / No / Explain		
3	Flange	WR187 Choke flange (Circular Flange)	Yes / No / Explain		

#### 15. WAVEGUIDE COMPONENTS /SECTIONS - Gaskets for Rectangular grooved flange (CPR187G)

##### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Waveguide Size	WR187 Standard	Yes / No / Explain		
2	Gasket Material	Silicone with conductive fillers	Yes / No / Explain		
3	Flange	Rectangular Grooved flange - CPR187G	Yes / No / Explain		

#### 16. WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide High Power Termination

##### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		

3	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
4	VSWR	1.3:1 maximum	Yes / No / Explain		
5	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
6	Waveguide Size	WR284 Standard	Yes / No / Explain		
7	Flange	CPR284G	Yes / No / Explain		
8	Cooling	Natural Air Cooling	Yes / No / Explain		
9	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
10	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
11	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
12	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for flange.	Yes / No / Explain		

## 17. WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide to Coaxial Adaptor

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange	CPR284G	Yes / No / Explain		
5	Average Power Handling	1 Watt or Higher	Yes / No / Explain		
6	Connector	N-type (Female)	Yes / No / Explain		

7	Insertion Loss	0.4 dB (maximum)	Yes / No / Explain		
8	VSWR	1.3:1 maximum	Yes / No / Explain		
9	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
10	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
11	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for flange.	Yes / No / Explain		

### 18. WAVEGUIDE COMPONENTS /SECTIONS - 6" Straight WR284 Waveguide with Mixed flange

#### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1	CPR284G	Yes / No / Explain		
5	Flange2	UG585 A/U or UG54 B/U or any part no. which is equivalent a WR284 circular choke flange with 8 holes	Yes / No / Explain		
6	Length	6-inch	Yes / No / Explain		
7	VSWR	1.3:1 maximum	Yes / No / Explain		
8	Insertion Loss	0.25 dB / meter (maximum)	Yes / No / Explain		
9	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
10	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		

11	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
12	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
13	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
14	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

**19. WAVEGUIDE COMPONENTS /SECTIONS - 4” Straight WR284 waveguide with CPR284G flange**

**Item specifications for WAVEGUIDE COMPONENTS /SECTIONS**

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR284G	Yes / No / Explain		
5	Length	4-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 maximum	Yes / No / Explain		
7	Insertion Loss	0.25 dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		

12	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

**20. WAVEGUIDE COMPONENTS /SECTIONS - 8” Straight WR284 waveguide with CPR284G flange**

**Item specifications for WAVEGUIDE COMPONENTS /SECTIONS**

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR284G	Yes / No / Explain		
5	Length	8-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 maximum	Yes / No / Explain		
7	Insertion Loss	0.25 dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		



## 21. WAVEGUIDE COMPONENTS /SECTIONS - 12” Straight WR284 waveguide with CPR284G flange

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR284G	Yes / No / Explain		
5	Length	12-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 maximum	Yes / No / Explain		
7	Insertion Loss	0.25dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 22. WAVEGUIDE COMPONENTS /SECTIONS - 24” Straight WR284 waveguide with CPR284G flange

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR284G	Yes / No / Explain		
5	Length	24-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 maximum	Yes / No / Explain		
7	Insertion Loss	0.25 dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

### 23. WAVEGUIDE COMPONENTS /SECTIONS - 40" Straight WR284 waveguide with CPR284G flange

#### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		

3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR284G	Yes / No / Explain		
5	Length	40-inch straight	Yes / No / Explain		
6	VSWR	1.3:1 maximum	Yes / No / Explain		
7	Insertion Loss	0.25dB / meter (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 24. WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide E - Bend

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR284G	Yes / No / Explain		
5	Type of Bend	E - Bend	Yes / No / Explain		

6	VSWR	1.3:1 maximum	Yes / No / Explain		
7	Insertion Loss	0.4 dB (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		
9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 25. WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide H - Bend

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR284G	Yes / No / Explain		
5	Type of Bend	H - Bend	Yes / No / Explain		
6	VSWR	1.3:1 maximum	Yes / No / Explain		
7	Insertion Loss	0.4 dB (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5 MW or Higher	Yes / No / Explain		

9	Average Power Handling	1.5 kW or Higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
12	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
13	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 26. WAVEGUIDE COMPONENTS /SECTIONS - WR284 Pressure Window (Rectangular Flange)

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange	CPR284G	Yes / No / Explain		
5	VSWR	1.1:1 (maximum)	Yes / No / Explain		
6	Window Material	Fiber Glass / Kapton Window / PTFE	Yes / No / Explain		
7	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
8	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		

## 27. WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide Pressure inlet with pressure gauge

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Frequency of Operation	2.7 -2.9 GHz	Yes / No / Explain		
2	Waveguide & Flange Material	Aluminum / Brass	Yes / No / Explain		
3	Waveguide Size	WR284 Standard	Yes / No / Explain		
4	Flange1 & Flange2	CPR284G	Yes / No / Explain		
5	Length	6-inch	Yes / No / Explain		
6	VSWR	1.3:1 (maximum)	Yes / No / Explain		
7	Insertion Loss	0.4 dB (maximum)	Yes / No / Explain		
8	Peak Power Handling	1.5MW or higher	Yes / No / Explain		
9	Average Power Handling	1.5kW or higher	Yes / No / Explain		
10	Finish	Internal - Chromate or equivalent & External - Painting	Yes / No / Explain		
11	Material	Fiber Glass / Kapton Window	Yes / No / Explain		
12	Environmental	(0-40) Degree Celsius, Coastal saline	Yes / No / Explain		
13	Pressure	15 PSIG operating & 25 PSIG withstanding	Yes / No / Explain		
14	Accessories	To be provided with one set of Mounting Screws & Gaskets suitable for both flanges.	Yes / No / Explain		

## 28. WAVEGUIDE COMPONENTS /SECTIONS - Gaskets for Rectangular grooved flange (CPR284G)

### Item specifications for WAVEGUIDE COMPONENTS /SECTIONS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Waveguide type	WR284 Standard	Yes / No / Explain		

2	Gasket Material	Silicone with conductive fillers	Yes / No / Explain		
3	Flange	Rectangular Grooved flange - CPR284G	Yes / No / Explain		

### **Supporting Documents required from Vendor**

#### **1. Datasheets**

#### **2. Authorized Dealership Certificate**

5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Authorized Dealership Certificate from OEM has to be submitted with the offer	Yes / No / Explain	
2	Test report to be provided during delivery	Yes / No / Explain	
3	Datasheet with mechanical diagram has to be provided with quote.	Yes / No / Explain	
4	Security Deposit: In the event of placement of order, you should submit Security Deposit at 3% of the order value of the P.O. The Security Deposit shall valid for a period of 60 days beyond the date of completion and acceptance of P.O/Contract. The Security Deposit will be discharged without any interest after completion and acceptance of the Contractual obligations.	Yes / No / Explain	
5	Performance Bank Guarantee:PBG shall be @3%. The said percentage reconsideration shall be based on guidelines issued by Govt of India, from time to time.	Yes / No / Explain	
6	Quote Validity: Minimum 90 days	Yes / No / Explain	
7	Delivery Period	Yes / No / Explain	
8	Liquidated Damages(L/D clause @ 0.5% subject to maximum 10% of the order value is applicable beyond the promised delivery schedule. )	Yes / No / Explain	
9	Delivery Term (FOR, VSSC):	Yes / No / Explain	
10	Taxes and other costs, if any	Yes / No / Explain	
11	Warranty	Yes / No / Explain	
12	Payment term:	Yes / No / Explain	
13	FORCE MAJEURE	Yes / No / Explain	
14	Any other terms	Yes / No / Explain	

## C.3 Price Bid



Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide High Power Termination	1.00 Nos.		-		
2	WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide to Coaxial Adaptor	2.00 Nos.		-		
3	WAVEGUIDE COMPONENTS /SECTIONS - 6" Straight WR187 Waveguide with mixed flange	4.00 Nos.		-		
4	WAVEGUIDE COMPONENTS /SECTIONS - 4" Straight WR187 waveguide with CPR187G flange	3.00 Nos.		-		
5	WAVEGUIDE COMPONENTS /SECTIONS - 6" Straight WR187 waveguide with CPR187G flange	3.00 Nos.		-		
6	WAVEGUIDE COMPONENTS /SECTIONS - 8" Straight WR187 waveguide with CPR187G flange	3.00 Nos.		-		

7	WAVEGUIDE COMPONENTS /SECTIONS - 12" Straight WR187 waveguide with CPR187G flange	3.00 Nos.					
8	WAVEGUIDE COMPONENTS /SECTIONS - 24" Straight WR187 waveguide with CPR187G flange	3.00 Nos.					
9	WAVEGUIDE COMPONENTS /SECTIONS - 40" Straight WR187 waveguide with CPR187G flange	3.00 Nos.					
10	WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide E - Bend	5.00 Nos.					
11	WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide H - Bend	5.00 Nos.					
12	WAVEGUIDE COMPONENTS /SECTIONS - WR187 Pressure Window (Rectangular Flange)	2.00 Nos.					

13	WAVEGUIDE COMPONENTS /SECTIONS - WR187 Waveguide Pressure inlet with pressure gauge	1.00 Nos.					
14	WAVEGUIDE COMPONENTS /SECTIONS - Gaskets for WR187 Choke flange	25.00 Nos.					
15	WAVEGUIDE COMPONENTS /SECTIONS - Gaskets for Rectangular grooved flange (CPR187G)	100.00 Nos.					
16	WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide High Power Termination	1.00 Nos.					
17	WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide to Coaxial Adaptor	2.00 Nos.					
18	WAVEGUIDE COMPONENTS /SECTIONS - 6" Straight WR284 Waveguide with Mixed flange	2.00 Nos.					
19	WAVEGUIDE COMPONENTS /SECTIONS - 4" Straight WR284 waveguide with CPR284G flange	3.00 Nos.					

20	WAVEGUIDE COMPONENTS /SECTIONS - 8" Straight WR284 waveguide with CPR284G flange	3.00 Nos.					
21	WAVEGUIDE COMPONENTS /SECTIONS - 12" Straight WR284 waveguide with CPR284G flange	3.00 Nos.					
22	WAVEGUIDE COMPONENTS /SECTIONS - 24" Straight WR284 waveguide with CPR284G flange	3.00 Nos.					
23	WAVEGUIDE COMPONENTS /SECTIONS - 40" Straight WR284 waveguide with CPR284G flange	3.00 Nos.					
24	WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide E - Bend	5.00 Nos.					
25	WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide H - Bend	5.00 Nos.					

26	WAVEGUIDE COMPONENTS /SECTIONS - WR284 Pressure Window (Rectangular Flange)	2.00 Nos.		-		
27	WAVEGUIDE COMPONENTS /SECTIONS - WR284 Waveguide Pressure inlet with pressure gauge	1.00 Nos.		-		
28	WAVEGUIDE COMPONENTS /SECTIONS - Gaskets for Rectangular grooved flange (CPR284G)	100.00 Nos.		-		

**Common charges (Applicable for all items)**

<b>Freight charge</b>	
<b>P&amp;F Charges</b>	