


# REQUEST FOR QUOTATION - ONLINE BIDDING

	<b>BHARAT HEAVY ELECTRICALS LIMITED</b> Electronics Division PB No. 2606, Mysore Road Bangalore - 560026 INDIA	<b>RFQ NUMBER:</b> NKRE000401  <b>RFQ DATE :</b> 01.02.2021	Due Date/Day: 16.02.2021 TUE Time : 13:00 HRS
MMI:PU:RF:003			
Please submit your lowest quotation subject to our terms and conditions attached for the material mentioned below. "Quotation to be submitted in E Procurement portal only"		(for all correspondence) Purchase Executive : Nilmani Kumar Phone : 26998663 Fax : E-mail: nilmanikumar@bhel.in	

SI No.	Description	Qty	Unit	Delivery qty	Delivery Date
1	SA0657940445 SMPS I/P: 220VDC,O/P:24V, 10A DC * HSN/SAC : 9032 Doc No.- PS4082050 Rev - 02 Test Certificate <b>SMPS,</b> <b>I/P: 220VDC,</b> <b>O/P: 24V, 10A DC</b> <b>AS PER PS/408/2050 Rev.02</b> <b>PHOENIX Type no: QUINT 24V DC/10A-AC</b> <b>or equivalent</b> <b>WEIDMULLER type no: CPM SNT 250W 24V</b> <b>10A or equivalent</b> <b>ABB type no: CP-C 24/10.0 or equivalent</b> <b>Or equivalent</b>	15	NO	15	10.05.2021

Total Number of Items - 1

- 1.
- 2.

## NOTES:

1. This RFQ is governed by:
    - a) INSTRUCTIONS TO BIDDERS/SELLERS and GENERAL CONDITIONS OF CONTRACT FOR PURCHASE available at <http://edn.bhel.com> (**RFQ-PO Terms & Conditions**)
    - b) Any other specific Terms and Conditions mentioned. of offers are required to furnish authorization letter for the same.
  2. Tender Result can be viewed in the website.
- \* The HSN/SAC no mentioned against the line items in the RFQ are indicative only.

For and On behalf of BHEL.

Nilmani Kumar  
Control Equipment



EDN

## PURCHASE SPECIFICATION

PS/408/2050

REV NO.02

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PURCHASE SPECIFICATION FOR 220VDC / 24VDC SMPSCODE NUMBER: SA0657940445REVISION HISTORY SHEET

REV NO.	DATE	NATURE OF CHANGE	REASONS	PREPARED BY	APPROVED BY
00	14.08.2013	FIRST ISSUE	-	Nishi	P K Das
01	19-07-2014	Minor alternation in specification.	Diode / Redundancy module for 20A DC	Nishi	Sathyanarayana
02	23.07.2020	THIRD ISSUE	AC requirement is removed	Rajkumar	R.Rukmani

APPROVED:

R.RUKMANI

PREPARED

ISSUED:

DATE:

RAJKUMAR

CE/GCE

23.07.2020



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## PURCHASE SPECIFICATION

PS/408/2050

REV NO.02

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PURCHASE SPECIFICATION FOR 220VDC / 24VDC SMPSCODE NUMBER: SA0657940445

APPROVED:

R.RUKMANI

PREPARED:

RAJKUMAR

ISSUED:

CE/GCE

DATE:

23.07.2020





EDN

**PURCHASE SPECIFICATION**

PS/408/2050

REV NO.02

Page 2 of 3

**1. APPLICATION:**

The power supplies are housed in the electronic cabinets with restricted air flow. The input to these power supplies are normally from station DC battery. Normally two power supplies are connected in parallel through a suitable module (Diode / Oring module) for achieving of redundancy operation.

**2. RATED:**

- 2.1 Nominal DC input : 220V +10%,-15% VDC (i.e. 187VDC to 242VDC)
- 2.2 Output voltage : 24V DC  $\pm 1\%$
- 2.3 Minimum output voltage adjustable range: 24 to 26V DC (wider range of adjustable output voltage is acceptable).
- 2.4 Output current : 10A at 0-55°C
- 2.5 Power: 240W min at 0-55°C
- 2.6 Output ripple :  $\leq 100\text{m Vpk-pk}$
- 2.7 Efficiency:  $\geq 88\%$
- 2.8 Current consumption at 220V DC:  $< 1.2\text{A}$

**3. MOUNTING:** DIN rail preferred. (Bracket or Plate mounting is also acceptable).**4. REGULATION:**

- 4.1 Line regulation :  $\pm 0.5\%$  or better
- 4.2 Load regulation :  $\pm 1\%$  or better

**5. ISOLATION:**

- 5.1 Input/Output : 1.5kV minimum routine
- 5.2 Input/Earth : 1.5kV minimum routine
- 5.3 Output /Earth : 0.5kV minimum routine

**6. POWER FREQUENCY ROUTINE TEST VOLTAGE**

- 6.1 Input/Output : 1.5kV minimum Voltage for 1 min
- 6.2 Input/Earth : 1.5kV minimum Voltage for 1 min
- 6.3 Output /Earth : 0.5kV minimum Voltage for 1 min





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**PURCHASE SPECIFICATION**

PS/408/2050

REV NO.02

Page 3 of 3

7. Overload and short-circuit protection with output power limitation : Required.
8. Parallel connection for redundancy : Yes (minimum 2 SMPS units)
9. Offered SMPS shall be suitable for any make of diode / oring module for achieving redundant operation
10. Monitoring of output DC voltage : Through energized output potential free relay contact
11. LED indication for operation : Required
12. Power reserve : minimum 20%
13. Power supply offered shall conform to following standards or its equivalent other international standards such as DIN, VD IEC etc:
  - 13.1 Noise emission EN55022
  - 13.2 Harmonics current IEC/EN61000-3-2
  - 13.3 ESD immunity IEC/EN61000-4-2
  - 13.4 Radiated immunity IEC/EN61000-4-3
  - 13.5 EFT/Burst IEC/EN61000-4-4
  - 13.6 Surge IEC/EN61000-4-5
  - 13.7 Safety approval IEC/EN60950-1
14. Confirmation of CE/UL approval for the SMPS offered to be indicated.
15. Supplier to furnish latest catalogues for the SMPS unit offered with dimensional details during offer stage.
16. Supplier to furnish clause wise compliance (from 2 to 15) during offer stage.
17. Supplier to furnish type test reports for clause no. 5, 13 & 14 during offer stage.
18. **Acceptance criteria:**
  - 18.1 Each power supply unit to be identified with a unique serial number for traceability.
  - 18.2 Supplier to confirm compliance to routine test as indicated against sl no - 2.1, 2.2, 2.3, 2.4, 2.6, 2.7, 4.1, 4.2, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3 of above indicated specification for each power supply unit serial number wise.
  - 18.3 Lot received at BHEL EDN QS-GI against purchase order quantity will be tested for compliance to the specification against clause 2.1, 2.2, 2.3, 2.6, 4.1 & 4.2 before acceptance of the lot. Sampling will be as per IS 2500.

		 <b>A4 - 10</b>	<b>PRE-QUALIFICATION CRITERIA FOR 220VDC/24VDC SMPS</b>		PQC:408-008												
					REV. NO. 00												
					Page 1 of 1												
<b>COPY RIGHT AND CONFIDENTIAL</b> THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.		<table border="1"> <thead> <tr> <th>Sl. No.</th> <th>CRITERIA</th> <th>DOCUMENT REQUIRED</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>The bidder should be a manufacturer (OEM) or their authorized dealer.</td> <td>Self-certification by manufacturers (OEM) / Authorisation letter from OEM in case of dealer</td> </tr> <tr> <td>2.</td> <td> <p>The bidder shall have valid test certificate complying to relevant standards mentioned in the technical specification PS4082050 Rev.02 for SMPS on the date of submission of offer against the tender.</p> <p>The supplier shall fully comply with the technical specification as per PS4082050 Rev.02 or should have supplied the item to BHEL as per the specification document PS4082050 against an earlier purchase order.</p> </td> <td>Test certificate (Both type test reports &amp; routine tests) shall be submitted / supplier should have supplied the item to BHEL earlier as per PS4082050.</td> </tr> <tr> <td>3.</td> <td>The Bidder shall submit the documents indicated for SMPS or should have supplied the item to BHEL as per the specification document PS4082050 against an earlier purchase order.</td> <td>           a) Reference list of customers.            b) Purchase order copies along with corresponding invoice and delivery challan.            c) Performance certificate of at least one end user/ customer.         </td> </tr> </tbody> </table>				Sl. No.	CRITERIA	DOCUMENT REQUIRED	1.	The bidder should be a manufacturer (OEM) or their authorized dealer.	Self-certification by manufacturers (OEM) / Authorisation letter from OEM in case of dealer	2.	<p>The bidder shall have valid test certificate complying to relevant standards mentioned in the technical specification PS4082050 Rev.02 for SMPS on the date of submission of offer against the tender.</p> <p>The supplier shall fully comply with the technical specification as per PS4082050 Rev.02 or should have supplied the item to BHEL as per the specification document PS4082050 against an earlier purchase order.</p>	Test certificate (Both type test reports & routine tests) shall be submitted / supplier should have supplied the item to BHEL earlier as per PS4082050.	3.	The Bidder shall submit the documents indicated for SMPS or should have supplied the item to BHEL as per the specification document PS4082050 against an earlier purchase order.	a) Reference list of customers. b) Purchase order copies along with corresponding invoice and delivery challan. c) Performance certificate of at least one end user/ customer.
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REV 00		APPROVED  <b>K. PARTHASARATHY</b>															
		PREPARED  <b>C. Aswathi</b>	ISSUED <b>408</b>	DATE <b>01/02/2021</b>													

Validate

Print

Help

### Item Wise BoQ

**Tender Inviting Authority: BHEL EDN BANGALORE**

**Name of Work:**SUPPLY OF MATERIAL

**Contract No: NKRE000401**

Name of the Bidder/ Bidding Firm / Company :												
<p align="center"><b>PRICE SCHEDULE</b></p> <p align="center">(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )</p>												
NUMBER #	TEXT #	TEXT #	NUMBER #	TEXT #	TEXT #	NUMBER #	NUMBER	NUMBER	NUMBER #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Item Code / Make	Quantity	Units	Quoted Currency in INR / Other Currency	BASIC RATE In Figures To be entered by the Bidder in Rs. P	GST (If applicable in Percentage)	GST Amount in Rs. P	HSN / SAC Code	TOTAL AMOUNT excluding taxes in Rs. P	TOTAL AMOUNT including taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	12	7	8	9	10	11	12	13
1	220VDC/ 24VDC SMPS	SA0657940445	15	Nos	INR			0.00		0.000	0.000	INR Zero Only
Total in Figures										0.000	0.000	INR Zero Only
Quoted Rate in Words		INR Zero Only										



COMMERCIAL BID				
Tender department: CE MM, EDN, BHEL, BANGALORE			RFQ/NIT/Enquiry no.	NKRE000401
		Bidder Name:		
Tender floated through NIC e-Procurement system Website - <a href="https://eprocurebhel.co.in/nicgep/app">https://eprocurebhel.co.in/nicgep/app</a> . Vendor to submit offer only through NIC e-Procurement system.				
Sr. No	DESCRIPTION	Details	Bidder's Response	Remarks if any
1	Price Basis	The quoted prices will be firm till supply completion of the tendered quantity.		
2	Terms of Delivery	DDL, BHEL EDN, Bangalore (Free delivery to EDN/BHEL Bangalore including packing & forwarding charges)		
3	Delivery Period	8 weeks from the date of issue of Purchase order. For Supply, date of receipt of material at BHEL EDN will be treated as delivery for purpose of penalty.		
4	Payment Term	100% within 45 days from the date of receipt of material at EDN Stores.		
5	Evaluation of L1 vendor	Evaluation will be done on item wise lowest bidder will be considered for ordering.		
6	Penalty for delay in delivery	Penalty of 0.5% per week at the basic price of the good for undelivered quantity of supply portion, subject to a maximum of 10%. For Supply, date of receipt of material at BHEL EDN Stores will be treated as date of delivery for purpose of penalty calculation		
7	Loading towards Penalty for delay in delivery	For any deviation in penalty term, the offer will be liable for loading as per Clause No. G, Point No.(b) of ITB.		
8	Other terms & conditions	For detailed Terms and Conditions, kindly refer to the following:A: INSTRUCTIONS TO BIDDERS/SELLERS(Doc No :BHEL:EDN:ITB-SHOP) available at <a href="http://www.edn.bhel.com">www.edn.bhel.com</a> (RFQ-PO Terms & Conditions)B: GENERAL CONDITIONS OF CONTRACT FOR PURCHASE(Doc no :BHEL:EDN:GCC-SHOP)available at <a href="http://www.edn.bhel.com">www.edn.bhel.com</a> (RFQ-PO Terms & Conditions)		
9	Validity	Quotation should remain valid for a period of 90 days from the due date.		
10	Reverse Auction	Reverse Auction is not applicable for tender		
11	Declaration for GFR 2017 Rule 144(Xi)	Declaration to be uploaded (Format attached)		
12	Declaration for Make in India	Declaration to be uploaded (Format attached)		
13	Declaration	The bidder declares that they will not enter into any illegal or undisclosed agreement of understanding, whether formal or informal with other bidder(s). This applies in particular to prices, specifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.  In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extent policies/guidelines.		
14	Warranty	12months from date of commissioning or 18 months from the date of supply whichever is earlier		
15	No Deviation	We hereby confirm that all the terms & conditions of tender are accepted without any deviation and any . Any additional commercial term or deviation in commercial term mentioned anywhere else shall be ignored and not be considered for evaluation		
16	Documents for bill processing	Complete set of despatch documents (original + 1 photocopy set) as per Purchase Order shall be submitted to Purchase Officer directly on below address for bill processing -  NILMANI KUMAR SR.ENGR/CE-MM, NEB 2ND FLOOR, BHEL-EDN, BANGALORE - 560026, KARNATAKA If documents are Digitally Signed by Authorized Signatory, submission of Hard copy of document is not required. However digitally signed soft copy of complete set of documents to be sent to below email IDs, <a href="mailto:nilmanikumar@bhel.in">nilmanikumar@bhel.in</a> , <a href="mailto:angajala@bhel.in">angajala@bhel.in</a> & <a href="mailto:arunml@bhel.in">arunml@bhel.in</a>  Depending upon the PO, despatch documents may include one or more documents from the following: 1. Invoice for payment (original) 2. Invoice for payment (extra copy) 3. Packing list mentioned items in each box number 4. LR Copy 5. Warranty certificate 6. Copy of UDYAM certificate for considering MSE, if applicable 7. Copy of First Inspection call letter along with TC if Pre-shipment inspection is applicable  The precise list of despatch documents needed for the PO will be specified in the Purchase Order. One set of Invoice, Packing List and L/R or AWB shall be e-mailed/faxed immediately to BHEL-EDN after despatch.		
Note -				



- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(1) Any tender condition does not prohibit any bidder to submit their offer along with clause wise deviation from the specification/commercial terms of tender. Changes, if any, in technical specification / Scope etc shall be informed to participating bidders only.</p> <p>(2) Any additional commercial term or deviation in commercial term, if sought by vendor, should be clearly brought out in this commercial bid document. Any additional commercial term or deviation in commercial term mentioned anywhere else shall be ignored and not be considered for evaluation</p> <p>(3) Any technical or commercial clarification for this tender can be raised within <b>one week</b> of floating tender. No clarification will be entertained by BHEL after given cutoff date. Clarifications with regard to the tender shall be addressed to purchase officers whose e-mail IDs are given below:<br/>nilmanikumar@bhel.in, angajala@bhel.in &amp; kanimozhid@bhel.in</p> <p>(4) The evaluation currency for this tender shall be INR.</p> <p>(5) Provision of Tax Collected at Source ( TCS ) is applicable for this tender</p> <p>(6) For the purpose of availment of GST amount as Input Tax Credit (ITC), time limits are mentioned and as of now it is September of the subsequent Financial Year. If complete set of invoice and other supporting billign document required as per PO is not submitted to concerned Purchase Officer at least 45 days prior to this cut-off date, BHEL will not be able to avail Input Tax Credit and hence corresponding GST amount will not be paid to the vendor / contractor.</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## ON COMPANY LETTER HEAD

Date - .....

### MODEL CERTIFICATE FOR TENDER REQUIRED AS PER Rule 144(Xi) of GFR 2017

To,

M/s Bharat Heavy Electricals Ltd.  
Electronics Division, Mysore Road,  
Bangalore – 560026

Ref:

Tender No. – .....

Company Name - .....

I have read the clauses regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the competent authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. (Where applicable, evidence of valid registration by the competent authority shall be attached)

Authorized Signatory  
(Name of signatory with company seal)

**On Bidder Letter Head**

**Date:**

To,

M/s Bharat Heavy Electricals Ltd.  
Electronics Division, Mysore Road,  
Bangalore – 560026

**Sub:** Model Clause / Certificate as per clause 9 (a) of Revised Public Procurement (Preference to Make in India Order, 2017 of DPIIT dated 13.06.2020.

Ref:

Tender No. – .....

Company Name - .....

I confirm that at the time of tender, bidding or solicitation, submitted offer meets the Local Content requirement for below type of supplier and percentage of local content for submitted offer is as below –

- i) Class-I Local Supplier **(Strikeout if not applicable)**
- ii) Class-II Local Supplier **(Strikeout if not applicable)**
- iii) Percentage of Local content -.....

The address is as below, where the local content / value addition is made:

- iv) Factory Address -.....  
.....  
.....

Authorized Signatory  
(Name of signatory with company seal)