

ITER-India, Institute for Plasma Research

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ENQUIRY - FOREIGN

OFFICE COPY

ENQUIRY NO

: I-IEF19012

Date

: 26/09/2019

Due Date

: 22/10/2019 by 5:00 PM (IST)

We invite your rate/s for the following item/s. The Instructions to bidders and Terms & Conditions are attached herewith.

Important Note:

1. Please Send your offer, ALONG WITH DESCRIPTIVE LITERATURE / CATALOGUE for the following items which we are interested to import directly against Foreign Trade Policy 2015-2020. Kindly go through the terms & conditions printed overleaf. Please ensure that your quotation reaches this office not later than above mentioned due date.

2. If Indian Agents are submitting the quotation on behalf of their Principal they should furnish the following documents without which their quotation is liable for rejection. a. Copy of Latest and Valid Authorization Certificate issued by their Principal. b. Copy of Proforma Invoice submitted by their Principal indicating the commission payable to the Indian agent, nature of after sale service to be rendered by the Indian agent. c. Copy of the Agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business. d. Indian agent who desire to quote directly on behalf of their foreign principals shall be enlisted with the Central Purchase Organisation (eg. DGS&D) under the compulsory enlistment scheme of the Ministry of Finance. Proof of enlistment to be submitted in the bid.

3. If Packing Materials are of any kind of Plant Origin, valid Phytosanitary Certificate issued by an Authorised Officer at the Country of Origin of the consignment in the format prescribed under the International Plant Protection Convention of the Food and Agricultural Organization shall be sent along with the shipping documents. This is a mandatory requirement under Law enacted by the Govt. Of India. Deviation from this may result in holding of the

consignment at customs causing delays which will be the sole responsibility of supplier.

4. Customs Duty Exemption Certificate: ITER-India can provide Custom Duty Exemption Certificate (CDEC) under the notification no. 39/96 dated 23/07/1996 as amended by notification no. 5/2012 - custom dated 07/02/2012 (s. no.37) in order to avail such exemption indian party shall quote in foreign currency only on behalf of their foreign principal/supplier & purchaser shall place the order directly on foreign principal/supplier. All expenses, except customs duty, towards procurement of the imported materials should be borne by the Contractor.

5. ITER-India, IPR is entitled to avail concessional rate of GST @ 5% (2.5% CGST and 2.5% SGST) as per Central Goods and Service Tax (CGST) Notification No. 45/2017-Central Tax (Rate) dated 14th November, 2017, State Goods and Service Tax (SGST) Notification No. 45/2017 – State Tax (Rate) dated 15th November, 2017 and IGST @ 5% as per Notification No. 47/2017-Integrated Tax (Rate) dated 14th November, 2017 for supply of Goods. Therefore, please consider GST in your quotation accordingly. IGST @ 5% is applicable for the items imported by ITER-India. Applicable IGST @ 5% will be taken for evaluation for the bids received from foreign bidders.

Sr No.	Material Description	Quantity	Unit	
1	Supply of 1500V Programmable DC power supply with accessories, as per attached detail specifications.	1	NOS	
2	Supply of 2000V Programmable DC power supply with accessories, as per attached detail specifications.	1	NOS	

Note:

- (1) Submit your quotation AT THE ABOVE ADDRESS IN HARD COPY ONLY.
- (2) Any clarification on this enquiry may be sought from the Purchase Officer, ITER-India.

- (3) Quote with complete technical details. Duly signed enquiry document with bidder's seal needs to be submitted as a part of bid. This will be considered as bidder's acceptance on enquiry document & contents therein.
- (4) Quote with complete technical details. Duly signed enquiry document with bidder"s seal needs to be submitted as a part of bid. This will be considered as bidder"s acceptance on enquiry document & contents therein.
- (5) Technical Specifications for each item are attached herewith (page 19). Duly filled, signed and stamped of the attached technical specifications and Price bid format to be sent along with the bid.
- (6) Required delivery time is within 05 months from the date of purchase order. Vendor must specify the deliver time in the quotation.
- (7) Indian agent shall bid only on behalf of one Principal/OEM.
- (8) In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same enquiry.
- (9) Purchaser reserves the right to order on either FCA or DAP basis.
- (10) In respect of Indigenous bidders: The price/s quoted should be on Door Delivery and freight paid basis inclusive of cost of packing & insurance.
- (11) ITER-India reserves the right to split the order item-wise.
- (12) In respect of Foreign Bidders: The price/s quoted should be on FCA (any international airport in supplier's country) basis as per Incoterms 2010. The price/s quoted should be inclusive of all applicable taxes, levies, duties applicable outside India. The bidder shall also indicate the DAP (ITER-India) charges in terms of % of FCA Price or Lumpsum charges. Purchaser shall consider 10% as freight, 1% as insurance & 2% for custom clearance & local transportation over & above FCA price, in case, the foreign bidder fails to provide DAP ITER-India charges separately. These charges shall be taken for price evaluation.
- (13) Percentage (%) of the agency commission (if applicable) to be paid to bidder's Indian agent shall be mentioned in the bid. Agency commission shall be paid in equivalent INR (exchange rate as on due date) only on successful completion of Final acceptance of ordered items.
- (14) The Indian bidder under the category of MSME Enterprise shall attach a MSME Certificate (Udhyog Aadhar) along with the offer.
- (15) Exchange rate as on due date of bid submission will be taken for conversion of foreign currency bid in equivalent INR for evaluation Purpose.

Encl:- as above

Rakhi Dharamdasani

OFFICER-I (PURCHASE & STORES)

ITER-India (IPR)

INSTRUCTION TO TENDERERS

- The Proforma Invoice should contain the following information:
- 2. The earliest delivery period and country of goods / equipment and Country of shipment should be mentioned.
- 3. Your banker's name and address should be mentioned. All bank charges outside India to be borne by the supplier.
- 4. Your banker"'s name and address should be mentioned. All bank charges outside India to be borne by the supplier.
- 5. The tenderer should submit quotation to the Purchase Officer in duplicate in sealed envelope superscribing the Tender No., date and due date of opening. Quotation should be submitted in the form of a Proforma Invoice and should complete in all respects with technical specifications. Note for Indian Agent: Bidder should submit quotation on behalf of only one foreign supplier.
- Agency commission, if any, payable to the Indian Agent from the FOB/FCA value should be clearly indicated in terms of percentage of the same. Also the address of the accredited Indian
 Agents should be furnished so that the agency commission can be paid in Indian Rupees directly to them at the exchange rate (T.T.buying) prevailing on the date of purchase order.
- 7. The approximate net and gross weight and dimension of packages / cases may be indicated in your offer.
- 8. Recommended spares for satisfactory operation for a minimum period of 5 years (wherever applicable) may be mentioned.
- 9. Details of any technical service, if required for erection, assembly, commissioning and demonstration should be mentioned clearly.
- 10. The prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer"s country.
- 11. The prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer"'s country.
- $12. \ \ \, The offershould be valid for a minimum period of 120 days from due date of opening of the tender. If asked for by the Purchaser, the tender er shall extend the validity of his quotation.$
- 13. Late tenders will not be considered. Quotations by cable/fax must be followed by detailed offers by mail/through courier so as to reach us before the due date.
- 14. The Purchaser reserves the right to accept the lowest or any tender in part or full without assigning any reasons. Purchaser also reserves the right to split the order at its sole discretion.
- 15. The details of Import License will be furnished in the Purchase Order.
- 16. Instruction / Operation manual containing all assembly details including wire diagrams should be sent wherever necessary in duplicate. All documents/correspondence should be in English Language only.
- 17. This enquiry is not a commitment and the Purchaser reserves the right to reject or cancel any or all offers.
- 18. Bidder should indicate clearly in his quotation whether he needs Export License for supply of the offered items. Furnish relevant document/format to be submitted by the purchaser, if Export License is involved.
- 19. Security Deposit (if applicable): The Supplier shall at the option of the purchaser, furnish an interest free Security Deposit for 10% of the purchase order value within 15 days from the date of Letter of Intent/Purchase order by way of Bank Guarantee for an equivalent amount.
- 20. Liquidated Damages (if applicable): The successful Vendor/Bidder should pay liquidated damages @ ½% (half percent) of the total order value for the delay of each week in the schedule of completion of supply/work envisaged in the Purchase Order subject to a maximum of 5% (five percent) of the total order value.
- 21. Advance payment, if any, will be made as per the Reserve Bank of India's stipulations and on receipt of Bank Guarantee from the Supplier from a Bank acceptable to Purchaser/Purchaser's Banker.
- 22. Advance payment, if any, will be made as per the Reserve Bank of India""s stipulations and on receipt of Bank Guarantee from the Supplier from a Bank acceptable to Purchaser/Purchaser's

TERMS AND CONDITIONS

- 1. It is expressly agreed that the acceptance of the stores contracted for is subject to final approval in writing by the purchaser whose decision shall be final.
- 2. If all or any of the stores are not of the quality specified, they may be rejected and suppliers should either replace or refund the money at the discretion of the purchaser.
- 3. Part shipment is not allowed unless specifically agreed by the purchaser.
- 4. As far as possible, stores should be dispatched by Indian flag vessels/Air India or through any Agency nominated by the purchaser.
- 5. Adequate packing to prevent damage in transit should be provided keeping in view the nature of item and the mode of transport.
- 6. ITER-India being an Autonomous Institute of Government of India, preference will be given for payment by Sight Draft. However, you may indicate your payment terms.
- 7. The Supplier will be held responsible for any demurrage/Wharfage paid due to non-receipt of document in time. Non-negotiable copies of dispatch documents should be sent by Email (scan copy) /Air Mail/Courier immediately after shipment.
- 8. Insurance wherever necessary will have to be arranged by the supplier on Warehouse to warehouse basis.
- 9. Inspection / Test certificate should be provided for the goods after testing it thoroughly at your works, if any testing agency is considered necessary, it shall be arranged by the Supplier.
- 10. The stores contracted should be guaranteed for a minimum period of 12 months from the date of acceptance against defective materials, design, workmanship, operation or manufacture. For defects noticed during the guarantee period, replacement/rectification should be arranged free of cost within a reasonable period of such notification. However, permits for re-export from and re-import into the purchaser"s country, if required shall be provided.
- 11. The stores contracted should be guaranteed for a minimum period of 12 months from the date of acceptance against defective materials, design, workmanship, operation or manufacture. For defects noticed during the guarantee period, replacement/rectification should be arranged free of cost within a reasonable period of such notification. However, permits for re-export from and re-import into the purchaser'''s country, if required shall be provided.
- 12. To fulfill the above guarantee condition, the Supplier shall at the option of the purchaser, furnish a Performance Bank Guarantee (as prescribed by the purchaser) from a Bank approved by the purchaser for an amount equivalent to 10% of the value of the Purchaser Order valid till 14 months (i.e. covering guarantee /warranty period) from the date of acceptance of items by the Purchaser. On the satisfactory performance and completion of the Purchaser Order, in all respects, the bank guarantee will be returned to the Supplier without any interest.
- 13. Where erection or assembly or commissioning is a part of the Purchaser Order, it should be done immediately on notification. The Supplier shall be responsible for any loss/damages sustained due to delay in fulfilling this responsibility.
- 14. Supplier is deemed to have warranted and indemnified the Purchaser against any Claim/dispute whatsoever on patent, trade mark etc.
- 15. All disputes or differences whatsoever arising between the parties out of or relating to the construction, meaning and operations or effect of Purchase Order arising out of this tender or the breach thereof shall be settled by arbitration in accordance with the Arbitration Rules of India and the award made in pursuance thereof shall be binding on the parties.
- 16. For items having shelf life, those with maximum shelf life should be supplied, if order is placed.
- 17. These terms and conditions are subject to Ahmedabad, India jurisdiction only.
- 18. DO NOT SEND CONSIGNMENT/PARCEL THROUGH COURIER MODE.





Annexure - I

Enq. No. I-IEF19012

Title	Supply of Programmable DC Power Supplies (1500V & 2000V) with accessories
Sub Title	Technical Part and Commercial Terms & Conditions

ITER-India, Institute for Plasma Research
Block A, Sangath skyz, Bhat-Motera Road, Koteshwar,
Ahmedabad – 380005, Gujarat, India





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1 Technical Part

1.1 Scope of Supply

Scope of supply under this procurement includes the following deliverables:

Table 1: List of Deliverables

A. Har	dware deliverables	T		
Sr. No.	Item description	Ref	erence	Quantity
A.1.	Programmable DC Power Supply (1500V DC) with accessories	Detail speciper section No <u>3</u>)	ification as - 1.2 (at page	1 No.
A.2	Programmable DC Power Supply (2000V DC) with accessories	Detail spec per section No 7)	ification as - 1.3 (at page	1 No.
B. Doc	ument deliverables			
B.1	Factory Test Report(s) before delivery of the PS unit to I	TER-India		
B.2	Instruction and Operating Manual (User Manual with Troubleshooting) along with delivery Supplier shall supply of set of specified documents.			
B.3	Standard and Regulatory compliance certificate along with delivery along with Hardware deliverable in Table 1 -			
B.4	Warranty Certificate (as per specified in the section- 1.1 12) along with delivery	0 at page No -	denverable in	1 Table 1 - <u>A</u>

1.2 Technical specifications for Programmable DC Power Supply (1500V)

This specification specify the Programmable DC power supply voltage rating 1500 [VDC], current rating min 3.3 [ADC] and maximum output power ~ 10 kW.

Table 2: Technical specification for 1500V DC power supply

Sr. No.	ITER-In	dia's required specifications	Supplier's Guaranteed specifications Compliance against ITER-India's required specifications	
1. AC Input specifications				
1.1	Nominal AC Input Voltage	400 [VAC], (3 phase + Ground) Supply Operating range: 360 – 440 [VAC]		
1.2	Nominal AC Input Frequency	50 [Hz] Operating Range : 45 – 55 [Hz]		
1.3	Power Factor	≥ 0.85 at Rated Power		
1.4	Input Isolation	≥± 2.5 [kV AC/DC] Input voltage terminals to ground		



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Sr. No.	ITER-India's required specifications		Supplier's Guaranteed specifications
			Compliance against ITER-India's required specifications
2. Output specifications			
2.1	Output voltage	0 - 1500 [VDC]	
2.2	Output current	minimum 3.3 [ADC]	
2.3	Maximum output power	~ 10 [kW]	
2.3		≤ 1 [%] of rated Value	
2.3	Voltage Ripple	(i.e. ≤ 15 [V rms])	
2.4	Line Regulation	\leq ± 0.5 [%] maximum change in output voltage (at full-scale voltage)	
		For ± 10 [%] change in line voltage	
2.5	Load Regulation	$\leq \pm 0.5$ [%] maximum change in output voltage (at full-scale voltage)	
		For no load to full load change	
2.6	Stability	≤± 1 [%] for 8 Hrs. operation	
2.7	Efficiency	≥ 85 [%]	
2.8		Typically ≤ 10 [ms] for $0 - 63$ [%] of output voltage change or	
2.0	Max slew rate / voltage rise time	Typically ≤ 50 [ms] for 0 – 100 [%] of output voltage change	
2.9	DC Output isolation	$\geq \pm 2 \text{ [kVDC]}$, output voltage terminals to ground	
3. Protec		output voltage terminals to ground	
		1.0	
		Overvoltage protection - settable	
3.1	Fault Protection	2. Overcurrent protection - settable	
	To turn off the power supply	Short circuit protection Over temperature protection	
	power suppry	Over Voltage: 10 [%] to (100-110) [%] of max voltage rating	
3.2	Protection trip setting range	Over Current: 10 [%] to (100 – 110) [%] of max voltage rating	
. Size &	Weight		
		Dimensions:	
4.1	Maximum	Width:19" inch rack compatible	
	allowable Size	(<u>482.6</u> [mm])	



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Sr. No.	ITER-India's required specifications		Supplier's Guaranteed specifications
			Compliance against ITER-India's required specifications
		Height: 3U (<u>133.4</u> [mm])	
		Depth: <u>650</u> [mm]	
4.2	Maximum allowable weight	45 [kg]	
5. Power	input & output conn	ections	
5.1		Lug compatible 3 phase & PE terminals (Ring type or pin type)	
	Input Connection	(at the rear side of the panel)	
5.2		Lug compatible +VE and -VE terminals (Ring type)	
	Output Connection	(at the rear side of the panel)	
6. Coolir	ng		
6.1	Cooling	Forced Air cooled	
7. Contr	ol specifications		
-	er supply shall be contr external voltage progr	rolled by Local (Manual) mode	
7.1	Manual mode operation	Power Shall be operated from front panel	
7.1.1	START/STOP Function	Turn on and Turn off PS unit	
7.1.2	Metering display	Digital Display for	
		output voltage, output current, settings points for (OV, OC)	
7.1.3	PS Status display	For example; FAULTS Indicator, TRIP Indicator, PS OUTPUT ON Indicator, PS OUTPUT OFF Indicator, STAND BY Indicator, READY Indicator, etc.	
7.1.4	Voltage Setting & Protection setting facility	Output voltage setting, Overvoltage trip and Overcurrent trip setting By suitable encoder input or multiturn potentiometer	
7.1.5	Power switch or suitable facility	To energized control circuit without engaging main power	
7.2	Remote mode operation	Power supply shall be operated with external voltage programming input	



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Sr. No.	ITER-India's required specifications		Supplier's Guaranteed specifications
		_	Compliance against ITER-India's required specifications
	External input throuprogramming	igh isolated analog and digital	
		Analog	
		output monitoring: 0 - 10 [VDC]	
		Input 0 -10 [VDC]	
	Programming and	Digital	
	monitoring level	Input : 0 to 5 [VDC] or TTL compatible	
		Output : 0 -5 [VDC] or TTL compatible	
	Essential Signal lis	t for remote mode operation	
	Must be provided w	rith a suitable connector	
7.2.1	Vin REF	0 -10 [VDC] proportional to 0 -100 [%] of PS output voltage.	
7.2.2	OV Trip Ref.	0 -10 [VDC] proportional to 0 – Max OV setting of PS output voltage.	
7.2.3	ON/OFF Status	Digital Output 0 -5 [VDC] or TTL Indicate power supply output is enabled or ON.	
7.2.4	Fault Trip	Digital Output 0 -5 [VDC] or TTL Indicate Interlock fault activated	
7.2.5	Start PS	Digital Input 0 -5 [VDC] or TTL To enable the power supply output	
7.2.6	Reset faults	Digital Input 0 -5 [VDC] or TTL To rest faults	
7.2.7	Stop PS	Digital Input 0 -5 [VDC] or TTL To Disable the power supply output	
7.2.8	OC Trip Ref	0 -10 [VDC] proportional to 0 –Max OC setting of PS output current.	
7.2.9	V-Monitor	0 -10 [VDC] proportional to 0 -100 [%] of PS output voltage.	
7.2.10	I-Monitor	0 -10 [VDC] proportional to 0 -100 [%] of PS output current.	
8. Standa	ards and Regulatory	compliance & Warranty	
8.1	EMC compliance	Complied with European EMC Directive for test and measurement products.	



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Sr. No.	ITER	R-India's required specifications	Supplier's Guaranteed specifications
			Compliance against ITER-India's required specifications
8.1.1	IEC /EN 61000	-4-2: ESD Test	
8.1.2	IEC /EN 61000	-4-3: Radiated Immunity Test	
8.1.3	IEC /EN 61000	-4-4: Fast transient Immunity Test	
8.1.4	IEC /EN 61000	-4-6: Conducted Immunity Test	
8.1.5	IEC /EN 61000	-4-8: Magnetic field Immunity Test	
8.1.6	IEC /EN 61000	-4-11: Voltage dip Test	
8.1.7	EN55022A or E test	N55011A: Conducted & Radiated emission	
8.2	CE Mark	Yes required	
8.3	ROHS	Yes required	
8.4	Warranty	Yes required, Standard Warranty (minimum 1 year)	
9. Make	and Model Nos.	(To be specified by supplier)	
with relevant Catalogue or supporting document related to			Make:
specifica	ations		Model No:

1.3 Technical specifications for Programmable DC Power Supply (2000V)

This specification specify the Programmable DC power supply required of voltage rating 2000 [VDC], current 10 [ADC], and maximum power ~ 20 kW.

Note: To achieve this rating, single PS unit or combination (i.e. Series/parallel operation) of maximum 2 PS unit may be used for fully complying technical specifications as per Table 3 at page no: 7

In the case of combination PS units,

- 1. The purchaser will consider it as a single unit PS (20 kW unit) with all necessary additional components (diodes, connecting links, remote signals connectors etc.); that may be required for combination. The required additional components shall be arranged & supplied by supplier and shall be included in the single quote of PS unit.
- 2. The technical specification shall be considered for combination of units not a single unit specifications, hence supplier shall provide compliance accordingly.

Table 3: Technical specification for 2000V DC power supply

Sr. No.	ITER-India's required specifications	Supplier's Guaranteed specifications
		Compliance against ITER-India's required specifications
1. Input speci	fications	



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Sr. No.	ITER-In	dia's required specifications	Supplier's Guaranteed specifications
			Compliance against ITER-India required specifications
1.1	Nominal AC Input Voltage	400 [VAC], (3 phase + Ground) Supply	
1.2	Nominal AC Input	Operating range : 360 – 440 [VAC] 50 [Hz]	
1.3	Frequency Power Factor	Operating Range : 45 – 55 [Hz] ≥ 0.85 at Rated Power	
1.4	Input Isolation	≥ ± 2.5 [kV AC /DC]	
2. Qutpu	t specifications	Input voltage terminal to ground	
2.1	Output voltage	0 - 2000 [VDC]	
2.2	Output current	10 [ADC]	
2.3	Maximum output power	20 [kW]	
2.4	Voltage Ripple	≤ 1 [%] of rated Value	
		(i.e. ≤ 20 [V rms])	
2.5	Line Regulation	\leq ± 0.5 [%] maximum change in output voltage (at full-scale voltage)	
		For ± 10 [%] change in line voltage	
2.6	Load Regulation	$\leq \pm 0.5$ [%] maximum change in output voltage (at full-scale voltage)	
		For no load to full load change	The second secon
2.7	Stability	≤±1 [%] for 8 Hrs. operation	
2.8	Efficiency	≥ 85 [%]	
2.9		Typically ≤ 10 [ms] for $0 - 63$ [%] of output voltage change	
2.7	Max slew rate/ voltage rise time	Typically ≤ 50 [ms] for $0 - 100$ [%] of output voltage change	
2.10	DC Output	$\geq \pm 2 [kVDC],$	
	isolation	output voltage terminals to ground	
. Protect	ions		
		Overvoltage protection –settable	
3.1	Fault Protection	2. Overcurrent protection – settable	
5.1	To turn off the	3. Short circuit protection	
	power supply	4. Over temperature protection	
3.2	Protection trip	Over Voltage: 10 [%] to (100-110)	



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Sr. No.	ITER-India's required specifications		Supplier's Guaranteed specifications
			Compliance against ITER-India's required specifications
	setting range	[%] of max voltage rating	
		Over Current: 10 [%] to (100-110) [%] of max voltage rating	
4. Size &	Weight		
		Dimensions:	
		Width:19" inch rack compatible	
4.1		(482.6 [mm])	
	16.	Height: 6U (<u>266.7</u> [mm])	
	Maximum allowable Size	Depth : 650 [mm]	
4.2	Maximum allowable weight	100 [kg]	
5. Power	r input & output conn	ections	
5.1		Lug compatible 3 phase & PE terminals (Ring type or pin type)	
3.1	Input Connection	(at rear side of the panel)	
5.2		Lug compatible +VE and -VE terminals (Ring type)	
	Output Connection	(at rear side of the panel)	
6. Cooli	ng		
6.1	Cooling	Forced Air cooled	market the second
7. Cont	rol specifications		
The pov	ver supply shall be cont	rolled by Local (Manual) mode	
Remote	(external voltage prog	ramming) mode	
7.1	Manual mode operation	Power Shall be operated from front panel	
7.1.1	START/STOP Function	Turn on and Turn off PS unit	
7.1.2	Metering display	Digital Display for	
		output voltage, output current, settings points for (OV, OC)	
7.1.3	PS status display	For example; FAULTS Indicator, TRIP Indicator, PS OUTPUT ON Indicator, PS OUTPUT OFF Indicator, STAND BY Indicator, READY Indicator, etc.	



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Sr. No.	ITER-II	ndia's required specifications	Supplier's Guaranteed specifications	
			Compliance against ITER-India's required specifications	
7.1.4	Voltage Setting & Protection setting facility	Output voltage setting, Overvoltage trip and Overcurrent trip setting By suitable encoder input or multiturn potentiometer		
7.1.5	Power switch or suitable facility	To energized control circuit without engaging main power		
7.2	Remote mode operation	Power supply shall be operated with external voltage programming input		
	External input throu programming	gh isolated analog and digital		
		Analog		
		output monitoring: 0 - 10 [VDC]		
		Input 0 -10 [VDC]		
	Programming and monitoring level	Digital	-	
		Input: 0 to 5 [VDC] or TTL compatible		
		Output : 0 -5 [VDC] or TTL compatible		
	Essential Signal list	for remote mode operation		
	Must be provided wi	th a suitable connector		
7.2.1	Vin REF 0 -10 [VDC] proportional to 0 - 100 [%] of PS output voltage.			
7.2.2	OV Trip Ref. 0 -10 [VDC] proportional to 0 – Max OV setting of PS output voltage.			
7.2.3	ON/OFF Status Digital Output 0 -5 [VDC] or TTL Indicate power supply output is enabled or ON.			
7.2.4	Fault Trip	Digital Output 0 -5 [VDC] or TTL Indicate Interlock fault activated		
7.2.5	Start PS Digital Input 0 -5 [VDC] or TTL To enable the power supply output			
7.2.6	Reset faults Digital Input 0 -5 [VDC] or TTL To rest faults			
7.2.7	Stop PS Digital Input 0 -5 [VDC] or TTL To Disable the power supply output			
7.2.8	OC Trip Ref 0 -10 [VDC] proportional to 0 –Max OC Setting of PS output current.			
7.2.9	V-Monitor	0 -10 [VDC] proportional to 0 -100		



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Sr. No.	ITER-In	dia's required specifications	Supplier's Guaranteed specifications Compliance against ITER-India's required specifications	
		[%] of PS output voltage.		
7.2.10	I-Monitor	0 -10 [VDC] proportional to 0 -100 [%] of PS output current.		
8. Stand	ard and Regulatory	compliance & Warranty	Hed DEST	
8.1	EMC compliance Complied with European EMC Directive for test and measurement products.			
8.1.1	IEC /EN 61000 -4-2	2: ESD Test		
8.1.2	IEC /EN 61000 -4-3	3: Radiated Immunity Test	(CENCER 4-50' STEEL	
8.1.3	IEC /EN 61000 -4-4	4: Fast transient Immunity Test		
8.1.4	IEC /EN 61000 -4-0	5: Conducted Immunity Test		
8.1.5	IEC /EN 61000 -4-8	8: Magnetic field Immunity Test		
8.1.6	IEC /EN 61000 -4-	11: Voltage dip Test		
8.1.7	EN55022A/EN550 test	11A: Conducted & Radiated emission		
8.2	CE Mark	Yes required		
8.3	ROHS	Yes required		
8.4	Warranty	Yes required, Standard Warranty (minimum 1 year)		
	tional components (i	n case of combination of PS)		
10. Mal	ke and Model Nos. ()	Γο be specified by supplier)		
	levant Catalogue or s	supporting document related to	Make:	
specific	ications		Model No:	

1.4 Factory test Report(S)

The Supplier has to submit the routine factory test report(s) as per technical specifications defined in Table 2 (page no - 3) & Table 3 (page no -7) to ITER-India for review before dispatching the item. After approval of this test report, ITER-India shall issue a dispatch clearance note to the supplier.

1.5 Delivery Period

The required delivery schedule for all deliverables is within 5 months from the date of the purchase order.

1.6 Delivery Basis



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- a. FCA(Supplier's factory/nearest international airport) as per INCOTERMS 2010 for foreign bidders
- b. Free Door Delivery basis for Indian bidders including transit insurance

1.7 Delivery address

Material shall be delivered to following address;

ICH&CD Lab (3rd Floor – Height – 13.725 meter), ITER-India Lab building, Institute for Plasma Research Campus, Bhat, Gandhinagar-382428 Gujarat, India

1.8 Packing & Shipment

The Material should be appropriately packed with one set of documentation & dispatched to ITER-India Lab, IPR. Prior information of the material dispatch should be given to ITER-India Purchase Officer.

1.9 Final Acceptance

After the receipt of the Power Supply (PS) unit at ITER-India site, ITER-India shall conduct basic functional tests of the PS unit. Upon successful completion of the tests (after resolving issues completely, if any) at the site, a final acceptance note shall be issued by ITER-India. The date of issuance of final acceptance note shall be considered as the date of final acceptance.

1.10 Warranty

Standard warranty (minimum 1 year) from the date of final acceptance at purchaser's end shall be provided.



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2 Commercial terms and conditions

2.1 Payment terms

The payment schedule for the supplier will be made as per the following terms (Table 4 at page No: <u>13</u>) on the production of the requisite documents:

Table 4: Payment Schedule

Sr. Payment Milestone % of the PO va No. payment		% of the PO value for payment	lue for Documents required from the supplier for release of payment		
1	Payment against complete delivery	80% [plus 100% of all applicable taxes & any other charges (if applicable)]	 a. Original Commercial Invoice mentioning country of origin – 03 Copies b. Clean on Board Air Way Bill (for Foreign supplier)/ Delivery challan (for Indian supplier) c. Dispatch clearance as issued by the purchaser d. Packing list – 03 Copies e. Factory Test Report – 01 Copy f. Insurance proof up to FCA(for Foreign Contractors) g. Phytosanitary certificate/ Fumigation ISPM 15 certificate approved by the competent authority (For Foreign supplier). h. Dangerous Cargo Certificate (if applicable) 		
2	Payment against successful completion of Final acceptance of all the deliverables specified in the PO against PBG.	20 %	 a. A copy of final Acceptance Note issued by the Purchaser b. Duly Signed Warranty Certificate c. Duly Certified Performa Invoice in triplicate d. Performance Bank Guarantee (PBG) for 10% of order value 		
	Total	100 %			

2.2 Bank Charges

- a) For Indian Supplier: All bank charges, if applicable, shall be borne by the supplier only.
- b) For Foreign Supplier: All the bank charges within India shall be borne by ITER-India. Similarly, all the charges outside India shall be borne by the supplier



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2.3 Taxes and Duties

- a) In respect of Foreign Bidder/Supplier: The price/s quoted should be inclusive of all applicable taxes, levies, duties arising in the supplier's/bidder's/manufacture's country or any other country/ies except India.
- b) In respect of indigenous Bidder/Supplier: The price/s quoted should be exclusive of all applicable Indian taxes, levies, duties which are to be mentioned in the price Bid (Part –B) at the prevailing rates
 - a. Goods and Service Tax (GST) (for Indian Bidder/Supplier) Applicable GST along with the HSN code for the quoted items should be mentioned clearly in the un-priced bid format [Annexure –A5 of Part A(I)] and the Price bid format (Part-B).
 - b. Indian Supplier/Bidder shall not charge GST against submission of exemption or waiver or charge concessional rate (5%) against submission of a certificate under below mentioned notifications by the Purchaser:
 - Integrated Tax (IGST) as per Notification by Department of Revenue, Ministry of Finance, Govt. of India Notification No. 47/2017 – Integrated Tax (Rate) dated 14th November 2017
 - Central Tax (CGST) as per Notification by Department of Revenue, Ministry of Finance, Govt. of India Notification No. 45/2017 – Central Tax (Rate) dated 14th November 2017
 - State Tax (SGST) as per Finance Department, Govt. of Gujarat Notification No. 45/2017 – State Tax (Rate) dated 15th November 2017
 - c. The supplier shall be liable to undertake an assessment of likely GST on the price of the supplied item being made to the purchase during the execution of the Contract in light of the anti-profiteering provisions being proposed under GST act. After completion of such assessment, Contractor shall forthwith inform the Purchaser of the extent of reduction in cost so that prices may be renegotiated accordingly and amendments can be made in the Contract. In case of any deviation(s) found at a subsequent stage, wherein GST impact has not been given effect to the cost for any reasons whatsoever, then any consequences arising thereof shall be borne by the Contractor. The Contractor hereto agrees that all liabilities arising out of any default from complying with the aforesaid directions and consequences thereof will be of the Contractor and Purchaser is authorized to recover the same along with interest from the Contractor and/or the same can be deducted from the amount payable to the Contractor
 - d. Contractor shall be liable to evaluate compliance requirements under GST and ensure a proper mechanism for undertaking the same is put in place so that there is no loss to the Purchaser due to non-compliance on your part. The Contractor agrees that in case of any loss arising out of acts of the Contractor or any non-compliance on the part of the Contractor, the Purchaser is authorized to recover the same along with interest from the Contractor and/or the same can be deducted from the amount payable to the Contractor
 - e. Contractor shall be liable to update GSTN an HSN code as and whenever applicable to the Item(s) supplied on invoice and any mismatch/rejection due to GSTN/HSN code will be on Contractor's account and any loss arising due to any non-compliance of the Contractor will be recovered along with the interest from the Contractor and/or the same can be deducted from the amount payable to the Contractor
 - f. GST registration (For Indian bidder): Bidder shall submit a copy of GST Registration certificate along with the bid.
 - g. Tax Deducted at Source (TDS) or any other leviable taxes and or duties.



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- h. Applicable TDS (applicable for Indian Contractor) at the prevailing rate under GST act on the Total order/contract value will be deducted from the invoice. Certificate of TDS will be issued by the Purchaser
- c) Custom Duty: ITER-India is exempted from payment of Customs Duty under notification no. 39/96 as amended vide 5/2012. Hence, Custom Duty payable in India shall not form a part of the bid (Applicable for import material cleared in India). The Purchaser will issue the customs duty exemption certificate for clearance of the ordered items (as applicable) This certificate shall be provided only if the Indian bidder quotes on behalf of foreign principal and order is placed on Foreign principal (Foreign Supplier) in Foreign currency. The certificate cannot be provided for order placed in INR.

2.4 Termination of Order/Contract for default

The Purchaser may, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Contractor, terminate the Contract in whole or in part, if the contractor fails to perform any obligation under the contract within the period specified in the order or any extension thereof if granted by the Purchaser. In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may purchase from elsewhere, after (thirty) 30 days' notice to the Contractor, on the risk and cost of the Contractor, the supplies, not delivered or other items of similar description when such deliverable exactly complying with the particulars are not in the opinion of the Purchaser readily procurable, such opinion being final, without canceling the Contract in respect of the consignments not yet due for supply. In case of such an event, the Contractor shall be liable for any loss which the Purchaser may sustain on that account. Contractor shall not, however, be entitled to gain on such purchase made on account of his default. The manner and method of such alternate purchase shall be at the entire discretion of the Purchaser, whose decision shall be final.

2.5 Performance Bank Guarantee (PBG)

- **2.5.1** The Contractor shall furnish to the Purchaser an interest free Performance Bank Guarantee (PBG) for 10 % (Ten percent) of the total Contract value by way of providing a Bank Guarantee from State Bank of India (SBI)/ICICI/IDBI/AXIS/Any Nationalized bank for the satisfactory performance of the Items supplied against the Contract. In respect of BGs received from foreign Contractor, Purchaser may take advice of SBI as to whether the foreign bank providing BG is a first class bank of international repute before taking a decision whether such BG should be confirmed by SBI in India.
- 2.5.2 The Performance Bank Guarantee (PBG) will be effective from the date of final acceptance and shall remain in force two months beyond the warranty period mentioned in the Contract.
- 2.5.3 In the event that the Bank Guarantee needs extension, the Contractor shall extend the validity of PBG for suitable period at his expenses. On the performance and completion of all contractual obligations including warranty, the original PBG shall be returned to the Contractor without any interest on receipt of a request from the Contractor. The Performance Bank Guarantee format is given in Annexure-II.



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3 Price bid format

Table 5: Price Bid format

Sr. No.	Item Description	Quantity in Nos.	Rate in INR
1.	Programmable DC Power Supply (1500V DC) with accessories Output voltage: 1500V Maximum power: 10 kW	1	
2.	Programmable DC Power Supply (2000V DC) with accessories Output voltage: 2000V Maximum power: 20 kW	1	
	Total		Constitution of the Consti

Note:

In the case of combination PS units for Sr. No – 2 in Table 5

1. The purchaser will consider it as a single unit PS (20 kW unit) with all necessary additional components (diodes, connecting links, remote signals connectors etc.); that may be required for combination. The required additional components shall be arranged & supplied by supplier and shall be included in the single quote of PS unit.

Sr.I	No Description	Bidder's Compliance
1	Other Charges (if any)	-
2	Delivery period (Within 5 Months From the date of Order)	Comply Yes/No (In case of No Please provide details)
3	Payment (ITER-India payment terms will apply) (Refer Sr. No. 2.1 In Annexure I)	Comply Yes/No (In case of No Please provide details)
4	Warranty (1 year from date of acceptance of items)	Comply Yes/No (In case of No Please provide details)
5	Validity period (90 days from due date of bid submission)	Comply Yes/No (In case of No Please provide details)
6	Agency Commission (if payable to Indian Agent) (To Specify)	
7	Indian Agents: Those who are submitting offer on behalf of their principal must attach valid authorization letter issued by their Principal. invariably.	
8	INCOTERMS 2010: Place of Delivery (To Specify)	
9	Packing & Forwarding (To Specify)	



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10	Inland Freight/Handling Charges (To Specify)	
11	Documentation Charges/Bank Charges (To Specify)	
12	DAP charges(in % of FCA or lumpsum charges) (To Specify)	
13	GST (Not included in quoted price) (For Indian bidders)	
14	GST @ 5% (As per Sr. No. 5 of Important Note) (For Indian Bidders)	Comply Yes/No (In case of No Please provide details)
15	GST No. (For indian Bidder)	
16	Udhyog Aadhar No. & Categpry (Micro/Small/Medium Enterprise)	
17	Discount (if any)	He is the state of
18	Remarks	

* F	ill	in	the	app	licab	le	details
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Place:	Authorised Signatory:

Date: Company Seal



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Anneuxre-II - Performance Bank Guarantee (PBG)

(On non-judicial stamp paper (of appropriate value)-For Indian Contractor (On bank's letter head) – For Foreign Contractor

BAN	NK GUARANTEE NO DATE:
1.	WHEREAS on or about the day of
2.	AND WHEREAS under the terms and conditions of the Contract an amount of (In words: only) representing balance percent payment out of the total value of the Contract of (In words: only) is to be paid to the Contractor on the final acceptance of the equipment and on the Contractor furnishing a bank guarantee in a manner herein contained towards satisfactory performance of the equipment during warranty period, viz months from the date of final acceptance/commissioning of the said equipment or months from the date of dispatch of the last lot of consignment whichever is earlier (Specify as per warranty clause in the Order).
3.	NOW WE,
4.	WE,(Bank) undertake to pay to ITER-India any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s), in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present guarantee bond being absolute and unequivocal. The payment so made by



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	us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
5.	WE,(Bank) hereby further agree that the decision of the Project Director, ITER-India as to whether the said equipment is giving satisfactory performance or not during the warranty period and as to the amount of damages suffered by ITER-India on account of the unsatisfactory performance of the said equipment shall be final and binding on us.
6.	AND WE, the(Bank) do hereby agree that our liability hereunder shall not be discharged by virtue of any Contract between ITER-India and the Contractor whether with or without our knowledge and/or consent or by reason of ITER-India showing any indulgence or forbearance to the Contractor whether as to payment, time for performance, or any other matter whatsoever relating to the Contract which but for this provision would amount to discharge of the surety under the law.
7.	THIS GUARANTEE will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
8.	OUR GUARANTEE shall remain in force until(two months beyond the Contract warranty period) and unless a claim under the guarantee is lodged with us on or before the above date, all rights of ITER-India under the guarantee shall be forfeited and we shall be relieved and discharged from all our liabilities thereunder.
	In witness whereof, we thehave executed this.
	Dated theday of20
For	(Indicate the name of bank with Postal address, Fax Number & email address)
	nesses:
(1)	Name: Signature
(2)	Name:Signature