Solar Power System

(50 KW Ongrid System)


POLYCAB
ACDB
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ACDB


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GeM
Government
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Dispatch Slip

Seller Details:
Company Name: BHUMI ENTERPRISES
Address: 569GHA/13, Lucknow, Lucknow, UTTAR PRADESH, 226023
Email Id: bhanuy89@gmail.com
Contact No:

Shipping Details:
Shipping To: Ashish Kumar Srivastava
Address: Varuna P. G. Hostel C.S. Azad University of Agriculture & Technology, Kanpur 208002 (U.P, KANPUR NAGAR, UTTAR PRADESH, 208002
Email Id: vc.csa-up@gov.in
Contact No: -9452963913-

Order Details:
Order Number: GEMC-511687723617631
Order Date: 08-Feb-2021

Invoice Details:
GeM Invoice No: GEM-12134848
GeM Invoice Date: 15-Mar-2021
Seller Invoice Number: 02
Dispatch Mode: Transport
No of Packages: ..... of 3
Dispatch Date: 15-Mar-2021

Description	Supplied Qty	Total Price
Solar Power Plant (Roof Top) for ONGRID System, Three Phase	1	Rs. 3789100.00

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Invoice

GeM Invoice No: GEM-12134848
GeM Invoice Date: 15-Mar-2021

Order No: GEMC-511687723617631
Order Date: 08-Feb-2021

Click here to download seller invoice

SELLER DETAILS:
Address: **BHUMI ENTERPRISES**
569GHA/13, Lucknow, Lucknow, UTTAR PRADESH, 226023
Email Id: bhanuy89@gmail.com
Contact No : 08418815147
GSTIN: 09HPOPS0497K1ZT

SHIPPING TO:
Consignee Name: Ashish Kumar Srivastava
Address: Varuna P. G. Hostel C.S. Azad University of Agriculture & Technology, Kanpur 208002 (U.P KANPUR NAGAR
UTTAR PRADESH 208002

Contact No: -9452963913-

BILL TO:
Buyer Name: Amit Kumar Rajpoot , Assitance
Address: C.S. Azad University of Agriculture & Technology, Kanpur 208017 (U.P Kanpur Nagar UTTAR PRADESH 208002 Agriculture Department Uttar Pradesh Chandra Shekhar Azad University Kanpur
GSTIN:
Department: Agriculture Department Uttar Pradesh
Office Zone:CS Azad University of Agriculture Technology
Organisation: Chandra Shekhar Azad University Kanpur

Seller Tax Invoice Number	Seller Tax Invoice Date	Dispatch Mode	Dispatch Date
02	15-Mar-2021	Transport	15-Mar-2021

Type of Transport	Tracking No	Tracking URL	Type & No of Packages
Road/Truck	....	Click here for tracking	Container 3

Place of Supply	Place of Supply State (State/UT Code)	Supply Type	Consignee GSTIN Number
Consignee Location	Uttar Pradesh / 09	Intra-State	

Entered in DS2 Page no 135

Product Description	HSN Code	Measurement Unit	GST UQC Name	Supplied Qty	Unit Price	Total Price inclusive all Taxes
Solar Power Plant (Roof Top) for	853690	set	CART	1	Rs. 3789100.00	Rs. 3789100.00

GRID System, Three Phase			O N S		
			Taxable Amount Tax Rate (%) Rounding Off	Rs. 3608667.00 5 Rs. -0.36	
				Grand Total	**Rs. 3789100.00**

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Contract

Contract No: GEMC-511687723617631
Generated Date: 08-Feb-2021
Bid/RA/PR No: GEM/2021/B/992281

Organisation Details

Type:	State Government
Ministry:	-
Department:	Agriculture Department Uttar Pradesh
Organisation Name:	Chandra Shekhar Azad University Kanpur
Office Zone:	CS Azad University of Agriculture Technology

Buyer Details

Designation:	Assitance
Contact No.:	0512-2534156-
Email ID:	buyer.csau-up@gov.in
GSTIN:	-
Address:	C.S. Azad University of Agriculture & Technology, Kanpur 208017 (U.P., KANPUR NAGAR, UTTAR PRADESH-208002, India

Financial Approval Detail

IFD Concurrence:	No
Designation of Administrative Approval:	Comptroller C.S Azad University of Agri Tech Kanpur
Designation of Financial Approval:	Comptroller C.S Azad University of Agri Tech Kanpur

Paying Authority Details

Payment Mode:	Internet Banking
Designation:	Assistance Account Officer
Email ID:	pao1.csau.kanpur@gembuyer.in
GSTIN:	-
Address:	C.S. Azad University of Agriculture & Technology, Kanpur 208002 (U.P., Kanpur Nagar, UTTAR PRADESH-208002, India

Seller Details

GeM Seller ID:	ARI2200001889617
Company Name:	BHUMI ENTERPRISES
Contact No.:	08418815147
Email ID:	bhanuy89@gmail.com
Address:	569GHA/13,Lucknow, Lucknow, UTTAR PRADESH-226023, -
MSME verified:	No
GSTIN:	09HPOPS0497K1ZT

*GST / Tax invoice to be raised in the name of - Consignee

Product Details

#	Item Description	Category Name	Model	HSN Code	Ordered Quantity	Unit	Price (Inclusive of all Duties and Taxes in INR)
1	Solar Power Plant (Roof Top) for ONGRID System, Three Phase	Solar Power Plant (Roof Top) for ONGRID System, Three Phase	50KVA On Grid Solar Power Plant	HSN not specified by seller	1	set	3,789,100
Total Order Value (in INR)							3,789,100

Consignee Detail

S.No	Consignee	Item	Lot No.	Quantity	Delivery Start After	Delivery To Be Completed By
1	Designation: - Email ID: vc.csa-up@gov.in Contact: -9452963913- GSTIN: - Address: Varuna P. G. Hostel C.S. Azad University of Agriculture & Technology, Kanpur 208002 (U.P., KANPUR NAGAR, UTTAR PRADESH-208002, India	Solar Power Plant (Roof Top) for ONGRID System, Three Phase	-	1	08-Feb-2021	10-Mar-2021

Product Specification for Solar Power Plant (Roof Top) for ONGRID System, Three Phase

Specification	Sub-Spec	Value

GENERIC	A Grid Tied Photo Voltaic (SPV) power plant consists of	SPV array, Module Mounting Structure, Power Conditi Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls and Protections, interconne cables and switches
	PV Array Mounting	Mounted on a suitable structure
	Grid tied SPV system is	Without battery and designed with necessary features to supplement the grid power during day time.
	Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc	as per relevant BIS or IEC or international specifications,as applicable
	Installation and testing for complete system	Yes including Civil Work, Designing, Fabrication, Cabling Work with suitable Bolts, Nuts, Clamps, Connectors and testing etc
INVERTER	Rated out put power of inverter (Kw)	50
	Switching device	IGBT
	No. of Phase (in Nos.)	1
	Inverter output wave form	Pure sine wave
	Technology	MPPT Based
	No.of MPPT per inverter (in Nos.)	2
	No. of string at input side of inverter (input port +ve and -ve) (hint: 1 sets contains 1 +ve and 1 -ve port)	4 Set
	Maximum power point tracker	Integrated in the PCU/inverter to maximize energy drawn from the array
	Operating Voltage Range of Inverter	200 V to 1000 V
	Over load support at Input side, DC	20% of Maximum Input Voltage for 3 phase system
	Maximum input current for each MPPT (in A)	28.5
	Service condition	Outdoor
	Ingress protection rating of inverter	IP 65 (for outdoor use)
	Cooling medium for inverter	Intelligent fan cooling
	Manual switch for disconnecting DC supply	Yes
	Inverter mounting type	Wall Mounted
	Standard accessories for Inverter	MC4 DC Connectors, AC Connectors, Mounting bracket, Nuts and Bolts and inverter manuals
	Isolation between input DC and output AC	Yes
INVERTER OUT PUT	Maximum current for 3 phase inverter (in A)	83.3
	Output voltage (in V)	415 for 3 phase
	Invert auto trip at output side	Lower : at 313 V, Higher : at 470 V wit adjustable
	Frequency range	50 Hz +/-3
	Grid Frequency Synchronization range	+ 3 Hz or more
	Grid Voltage tolerance	-20% and +15%
	Overall Efficiency (in %)	>98
	Efficiency Measurements for Power conditioners / Inverters	as per IEC 61683 / IS:61683
	Environmental Testing for Power conditioners / Inverters	as per IEC 60068-2 (1,2,14,30) /Equivalent BIS Std
	PCU/inverter shall be capable of complete automatic operation for	wake-up, synchronization and shutdown.
	Out put over current protection	Yes
	Out put over voltage protection	Yes

	Earthing for each inverter	G.I. Pipe, G.I. Wires and earthing as per IS:3043-198.
	Danger boards and signages	3 No.
PV Module	PV Module manufactured in	India
	PV Module conforming to	IEC 61215/IS:14286 latest for Crystalline silicon terrestrial
	PV Moduels Construtión, Testing and Safety requirements	as per IEC 61730 (Part 1) and (Part 2) latest
	PV Modules shall comply Salt Mist Corrosion testing	as per IEC:61701/IS:61701 latest
	PV Module rating (in Wp)	Range 250 - 1000
	Tolerance for rated out put power of PV Module	+/-3%
	No. of PV Module for each solar power plant system	10
	The peak-power point voltage and the peak-power point current of any supplied module	not vary by more than 2 %
	Protective devices against surges at the PV module	Yes
	Material for Module Frame (Corrosion resistant)	Anodized aluminum
	Each PV Moudle supply with	IV Curve sheet at STC
	Each PV Module shall supply with RF ID tag with complet information about PV Modules	Yes
ARRAY STRUCTURE	Material of mounting structure	Hot dip galvanized MS mounting structures
	Angle of inclination as per the site conditions to take maximum insolation	Yes for each mounting structure
	Material of mounting structure for mounting the modules/ panels/arrays	Structural Steel. Grade: E300 (as per IS:2062:2011 latest)
	Galvanization of the mounting structure	as per IS:4759 latest
	Structural material shall be corrosion resistant and electrolytically compatible	Module frame, fasteners, nuts and bolts
	Material of fastners	Steel as per IS:1367 (Pt.1):2002 latest
	The structures design	Designed to allow easy replacement of any module
	Civil structures	As per the load baring capacity of the roof and the suitable structures based on the quality of roof
	The total load of the structure (when installed with PV modules)	Less than 60 kg/m2. on the terrace
	Minimum clearance of the structure from the roof level	300 mm
JUNCTION BOX	The junction boxes	Provided in the PV array for termination of connecting cables
	Junction Box on PV Module	Sealed type
	Material of Junction Box	FRP (Fibre reinforced plastics)
	Ingress protection (Degree of Protection) for Junction Box	IP65
	Wires/cables termination	Through Cable Lugs
	Input and output termination	Through single or double compression cable glands.
	Copper bus bars/terminal blocks housed in the junction box with suitable termination threads	Yes
	Provision of earthing	Yes
	Surge protection device for each junction box	Yes
Wind Load	The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed	Yes
	Compliance to wind velocity test for the Mounting structure of PV System	as per IS 875:1987 part 3 latest
	Regional wind withstand capacity which the Mounting structure of PV system support is suitable to withstand (in Km/Hour)	180
	Minimum guarantee for maintaing of out put peak watt capacity	> / = 90% at the end of 10 years and >/= 80% at the end of 25 years

OTECTION OR INVERTER	Short circuit protection	Yes
	Overload protection	125% for 30 sec
	Over temperature protection	Yes at 65 Deg. C Cooling Fan will auto switch ON
	Surge protection	Metal Oxide Varistor (MOV)
	Insulation Resistance Monitoring	Yes
	Grid Monitoring protection	Yes
	THD (in %)	<1.5%
	Power factor at rated out put power	> 0.9
	Inverter body material	Aluminium Casting
SERVICE CONDITION	Operating temperature	-20 to +50 deg. C
	Relative Humidity (in %)	> 95% non condensing
	Maximum altitude above sea level (in m)	4000
DISPLAY FEATURES ON INVERTER	Type of display	LED
	Display parameters	DC Voltage, DC Current, AC Voltage, AC Current, Out put frequency, Power Factor
	Display for Generating power data	Daily, Weekly, Monthly, Yearly with total generation
	Generating power Data storage facility	Yes for 2 Years from the date of commissioning
	Interface facility for transmitting the generating power data for cloud storage	With Wifi Dongle
	Net meter	Approved by Government of India/State Government authority concerned for connecting to Grid
Add on items - DC DISTRIBUTION BOARD	DC Distribution panel to receive the DC output from the array field	Yes with surge arrestors
	Ingress protection (Enclosure protection) of DC Distribution Box	IP65
	Material of bus bar and size	Copper, size as per inverter rating
	Circuit Breaker for input side (DC side) for each inverter	MCB 15 A
Add on items - CABLE FOR INPUT	ISI Marked Connecting cables according to inverter rating for each system	PV Module to Inverter DC
	Electric Cable for Input	1C x 4 Sq. mm. Copper Cable (as per IS:694:2010 latest)
	Cable Length for PV Module to Inverter, DC (in m)	5
Add on items - AC DISTRIBUTION BOARD	AC Distribution Panel Board (DPB) for controlling the AC power from PCU/inverter	3 Phase 415 Volt +/- 10%, 50 HZ +/-3 Hz
	Panel construction	Metal clad, totally enclosed, floor mounted, air insulated, cubical type with change over switch
	Ingress protection (Enclosure protection) of AC Distribution Box	IP65 for outdoor
	All switches and the circuit breakers, connectors should conform to	IS 60947 part I, II and III.
	Panels designed for minimum expected ambient temperature	45 deg. C
	Circuit Breaker for output side (AC side) for each inverter	MCB 100 A
Add on items - CABLE FOR OUTPUT	ISI marked Connecting cables according to inverter rating for each system	From Inverter to Net Meter and to mains at LT Bus bar while in grid tied mode
	Conformity of the specification for cable	3.5C x 6 Sq. mm. Copper Cable (as per IS:694:2010 latest)
	Cable length for output side (from inverter to Net Meter for each system) (in m)	40
Other Add on items	Cabling work at input side for each system	With PVC Conduit pipe with necessary clamps and screws
	Cabling work at Output side for each system	With G.I. Cable Tray with fitment accessories
	Lightning arrestor for each unit	Yes

WARRANTY & GUARANTEE	Warranty for PV Modules from the date of supply as per MNRE specn	>/=25 Years
	The Warranty Card	Contain the details of the system and information about the system and conditions of warranty
	OPERATION and MAINTENANCE MANUAL for each solar PV module shall be furnish to the buyer / consignee	Yes
	All the test reports and certificates shall be furnish by the seller to buyer / consignee on demand	Yes
	Minimum area required for installation Solar panels (sq. mt) - Must declare in Sq. Mtr.	2000
	Minimum area required for installation of Solar Inverter (sq. mt) - - Must declare in Sq. Mtr.	2000
	Minimum area required for installation of Net Meter (sq. mt) - - Must declare in Sq. Mtr.	1000
	In case of Grid failure, or low or high voltage	Solar PV system out of synchronization and disconnected from the Grid
	Provision for Isolation of inverter output with respect to the Grid	Provided with 4 Pole Isolator
	Locking facility for isolation switch	Yes
CERTIFICATIONS	PV Modules shall comply with BIS compulsory registration scheme and certificates shall furnish to buyer / consignee on demand	Yes
	BIS CRS Certificate for PV Module	as per IS:14286 (for Crystalline Silicon Terrestrial Photovoltaic (PV) modules)
	BIS CRS Number - Must declare	2018-3419/R-51000566
	Availability of type test reports ofm Wind Load withstand test for Mounting strucutre including calculation sheet from Central Govt., Lab/NABL ILAC acreediated lab to prove conformity of the specification and agreed to furnish test reports and certif	Yes
	Availability of type test reports for PCU/Inverter, PV Module to prove the conformity of the specifiction from	BIS approved Lab
	Report Number - Must declare	BIS approved Lab
	Report date - Must declare	2018-3419/R-51000566
	Name of Lab - Must declare	BIS LAB
	Address of lab - Must declare	MANAK BHAWAN
	Agreed to furnish all the test reports and certification to buyer / consignee on demand	Yes

Buyer Defined Additional Specification for Solar Power Plant (Roof Top) for ONGRID System, Three Phase

Specification	Value
Original authorisation of manufacturer is mandatory to produce by re seller	Original authorisation of manufacturer is mandatory to produce by re seller
Original authorisation of manufacturer is mandatory to produce by re seller	Original authorisation of manufacturer is mandatory to produce by re seller

Terms and Conditions

1. General Terms and Conditions

1.1 This Contract between the Seller and the Buyer, is for the supply of the Goods and/ or Services, detailed in the schedule above, in accordance with the General Terms and Conditions (GTC) as available on the GeM portal (unless otherwise superseded by Goods / Services specific Special Terms and Conditions (STC) and/ or BID/Reverse Auction Additional Terms and Conditions (ATC), as applicable

1.2 Terms of delivery: Free Delivery at Site including loading/unloading. In respect of items requiring installation and / or commissioning and other services in the scope of supply (as indicated in respective product category specification / STC / ATC), and the cost of the same is also included in the Contract price.

1.2.1 Contracted goods should be delivered at the consignee or designated delivery location as per the working time of the buying organisation. Seller may get the same confirmed from consignee before scheduling delivery.

1.2.2 A copy of the contract should be available with the messenger / dispatching agency that delivers the Goods at consignee / delivery location (preferably pasted / attached outside the consignment / package) for easy reference and ease in delivery acceptance.

1.3 **Delivery period:** The Delivery Period/Time shall be essence of the Contract and delivery must be completed not later than such date(s). Any modification thereto shall be mutually agreed and incorporated in the Contract as per the provisions of the GTC.

1.4 **Performance Security:** If the Seller fails or neglects to observe or perform any of his obligations under the contract it shall be lawful for the Buyer to forfeit either in whole or in part, the Performance Security furnished by the Seller.

1.5 **Taxes and Duties:** Contract Prices are all inclusive i.e. including all taxes, duties, local levies / transportation / loading-unloading charges etc. Break up of GST shall be indicated by the Seller while raising invoice / bill on GeM. While submitting the bill / invoice Seller shall undertake that the Goods and Services Tax (GST) charged on this bill is not more than what is payable under the provision on the relevant Act or the Rules made there under and that the Goods on which GST has been charged have not been exempted under the GST Act or the Rules made there under and the charges on account of GST on these goods are correct under the provision of that Act or the rules made there under.

1.6 **Octroi Duty and / or other local taxes:** Contract Prices are all inclusive hence no reimbursement over and above the contract price(s) shall be allowed to seller towards payment of local taxes (such as levy of town duty, Octroi Duty, Terminal Tax and other levies of local bodies etc).

1.7 **Limitation of Liability:** The provisions of limitation of liability between Buyer and Seller as given in the GTC shall be applicable here.

1.8 **Resolution of disputes:** The provisions of DISPUTE RESOLUTION BETWEEN BUYER AND SELLER as given in the GTC shall be applicable here.

1.9 **Liquidated Damages:** If the Seller fails to deliver any or all of the Goods/Services within the original/re-fixed delivery period(s) specified in the contract, the Buyer will be entitled to deduct/recover the Liquidated Damages for the delay, unless covered under Force Majeure conditions aforesaid, @ 0.5% per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value without any controversy/dispute of any sort whatsoever. In case, Service Level Agreement (SLA) is applicable the same shall be applicable for the Contract.

1.10 **Financial Certificate:**

1.10.1 The expenditure involved for this purpose has received the Sanction of the competent financial authority.

1.10.2 The funds are available under the proper head in the sanction budget allotment for the concern financial year.

1.10.3 I have been fully authorized by the department to sign the supply order or incur the liability of the Goods being ordered.

1.11 The bidder should submit a self declaration to the effect in bidder's official letter head that their agency have not been black listed by any Agency whatsoever till date.

2. Additional Terms and conditions

2.1 Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

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