

KARNATAKA STATE ELECTRONICS DEVELOPMENT CORPORATION LTD
2nd Floor, TTMC 'A' Block, K H Road, Shanthinagar, Bangalore - 560027
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KEONICS INVITES TENDER FROM REPUTED FIRMS FOR THE
"Supply & Installation of 30 KVA On-Line-UPS"

TENDER REFERENCE : KSEDCL/ITS/MM/49/2018-19/, Date: 26-02-2019

DATE OF COMMENCEMENT OF : 26-02-2019
SALE OF TENDER DOCUMENT

LAST DATE FOR SALE OF TENDER : 02-03-2019, 11:00 AM
DOCUMENT

LAST DATE AND TIME FOR : 02-03-2019, 01:00 PM
RECEIPT OF TENDERS

TECHNICAL BID OPENING : 02-03-2019, 02:30 PM.

COMMERCIAL BID OPENING : 04-03-2019, 02:30 PM.

PLACE OF OPENING OF TENDERS : Above Address

ADDRESS FOR COMMUNICATION :

Asst. Manager-[ITS]
KEONICS,
2nd Floor, TTMC 'A' Block,
K H Road, Shanthinagar,
BANGALORE – 560 027

SECTION I. INVITATION FOR TENDERS (IFT)

- 1) The Asst. Manager-[ITS], KEONICS, Bangalore, invites tender from eligible tenderers for the **“Supply & Installation of 30 KVA On-Line-UPS”**.
- 2) The tenderers may submit tenders for all of the Items/goods/services. Tenderers are advised to note the qualification criteria specified below to qualify for award of the contract.
- 3) Tender documents (and additional copies) may be downloaded from the web site i.e. www.keonics.in/downloads from 26-02-2019, 02:30 PM. The tender processing charges on payment of non-refundable fee of **Rs. 280/- (Rs.250+30 GST@ 12%) (Rupees Two Hundred Eighty Only)**, in the form of Demand Draft / Pay Order on any Nationalized / Scheduled bank payable at Bangalore in favour of KEONICS, Bangalore up to 02-03-2019, **11:00 AM**.
- 4) Tenders must be accompanied by earnest money deposit of the amount specified in the tender document, drawn in favour of KEONICS Bangalore,
- 5) Price Bid should be submitted through sealed quotations super scribing the tender No. on the envelope containing EMD only to the Asst. Manager-[ITS] for reference on or before 02-03-2019, **01:00 PM**. The bid will be opened on next working day **at 14:30 hrs**. If the office happens to be closed day on the date of receipt of the tenders as specified, the tenders will be received and opened on the next working day at the same time and venue.

INSTRUCTIONS TO TENDERERS

ELIGIBLE TENDERER:

Sealed Tenders are invited from reputed vendors for the **“Supply & Installation of 30 KVA On-Line-UPS”** addressed to The **Asst. Manager-[ITS]**, 2nd Floor, TTMC ‘A’ Block, K. H. Road, Bangalore-560027. All Tenders in the prescribed form at **Annexure-I** should be submitted before the time and date fixed for the receipt of tenders as set forth in the tender papers. Tenders received after the stipulated time and date shall be rejected. Bidder shall not be under declaration of ineligibility for corrupt & fraudulent practices issued by the Government of Karnataka.

TENDERS ELIGIBILITY & QUALIFICATION

The Tenderer shall provide satisfactory evidence acceptable to the purchaser to show that:

- He has adequate following financial standing.
- Average total turnover of the tenderer for last 3 financial years must be at least 10 Lakhs, and it should be certified by CA.
- Bidders must submit copies of GST, PAN, Income Tax Registration certificates and latest returns.
- Bidder shall furnish last three years IT returns along with the PAN registration.
- The Bidders Company should be registered in Karnataka and should have office in Bangalore.

EARNEST MONEY

- **Tenderer shall accompany with Price Bid of tender an Earnest Money Deposit [EMD] of Rs. 6,000/- (Rupees Six Thousand Only)**
- EMD should be in the form of Crossed Demand Draft (Scheduled Nationalized Indian Banks Only) **in favour of KEONICS, Bangalore.**
- The Earnest Money shall be valid and remain deposited with the Purchaser for the period of 60 days from the date of successful execution of project.
- No interest will be payable by the purchaser on the Earnest money.
- The Earnest Money deposited is liable to be forfeited if the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of his Tender.
- The Earnest Money of the successful tenderer will be returned after the successful completion of work. The Earnest Money of all unsuccessful tenderers will be returned by the Purchaser.

VALIDITY OF TENDER

The offer shall be kept valid for acceptance for a minimum period of 60 days from the date set for opening of Price Bid.

DUE DATE FOR TENDER SUBMISSION:

Price Bid should be submitted through Hard copy only. As detailed will be received by the Asst. Manager-[ITS], KEONICS, Bangalore, at his office on or before 02-03-2019, 1:00 PM. If the said date happens to be a holiday for this office, the tenders will be received up to 1:00 PM on the next working day.

The Asst. Manager-[ITS], KEONICS, Bangalore, may extend the due date for submission of tender by issuing an amendment and the tenderers previously subject to the original due date for submission will then be subject to the new date for submission, as extended.

PROCEDURES FOR SUBMISSION OF TENDERS:

- Tenderer are advised to go through the tender documents in full detail and understand all the provisions and stipulated contained therein before submitting the tender.
- The tender must be submitted in the form prescribed so as to be received within the stipulated date and time.
- Tender submitted by telex, cable, E-mail or fax would not be accepted and rejected summarily.
- **The tender for each sector of Price Bid should be submitted through 1 cover system.**

Shall be addressed to

Asst. Manager-[ITS]
KEONICS
2nd Floor, TTMC 'A' Block
Shanthinagar, Bangalore - 560 027.

The envelope shall carry the name addresses of the tenderer prominently.

TENDER OPENING:

- The Asst. Manager-[ITS], KEONICS, Bangalore, will open the tender on the time & date mentioned in Tender Form in the presence of the tenderers or their authorized representatives at the address mentioned in Tender Form for. In the event of the specified date of tender opening being declared a holiday, the tenders will be opened at the same time on the next working day.
- On Opening the tender, the Asst. Manager-[ITS], KEONICS or authorized officer will read out the details as per the checklist of each tendered. No other details will be readout or disclosed.

FRAUDS AND CORRUPTION:

Bidders, Suppliers, Contractors and their subcontractors and Consultants under observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy,

- a. **Defines, for the purposes of this provision, the terms set forth below as follows:**
- (i) "Corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - (ii) "Fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "Collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;
 - (iv) "Coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the acts of a party;
 - (v) **"Obstructive practice" is:**
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a KEONICS investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; and
 - (bb) acts intended to materially impede the exercise of the KEONICS's inspection and audit rights provided for under sub-paragraph (e) below.
- b. Will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in

- corrupt, fraudulent, collusive or coercive or obstructive practices in competing for the contract in question;
- c. Will cancel the contract if it determines at any time that incorrupt, fraudulent collusive, coercive, or obstructive practices during the execution of that contract KEONICS will take timely and appropriate action satisfactory to address such practices when they occur.
 - d. Will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has, directly or through an agent, engaged, in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for, or in executing, contract; and

AWARD OF CONTRACT

- The tender accepting authority has the right to accept any tender and to reject any or all tenders without assigning any reason.
- Notwithstanding anything that is said herein, the tender accepting authority reserves the right to accept or reject any tender, and to cancel the tendering process and reject all tenders, at any time prior to the award of tender, without thereby incurring any liability to the affected tenderer or tenderers of the grounds for the authorized tender accepting committee action.

NOTIFICATION OF AWARD:

- The Asst. Manager-[ITS], KEONICS in writing by letter, will notify the tenderer whose tender has been accepted of the award.
- Upon furnishing by the successful tenderer or tenderers the performance security deposit and upon signing the agreement the Directorate will promptly notify the other tenderers that their tenders have been unsuccessful and will arrange to return their EMD.

REVIEW OF CONTRACTS BY KEONICS

- Bidders, suppliers, and contractors, under these contracts, observe the highest standard of ethics during the procurement and execution of contracts. In pursuance to the policy, KEONICS will have the right to require that a provision be included in bidding documents and in contracts, requiring bidders, suppliers, and contractors to permit to inspect their accounts and records and other documents relating to the submission and contract performance and to have them audited by auditors appointed by KEONICS.
- Contracts which are (i) not subject to prior review by the KEONICS, and (ii) awarded following these guidelines will be post reviewed by the KEONICS.

GENERAL

The tenderers must ensure that the conditions laid down for submission of Tenders detailed in the preceding paras are completely and correctly fulfilled. Tenders, which are not complete in all respects as stipulated above, shall be summarily rejected.

Specification of “Supply & Installation of 30 KVA On-Line-UPS”

01	30 KVA On-Line-UPS	01
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Detail Specifications

No.	Parameters	Specifications
GENERAL-1		
01.	Technology	Online UPS Double Conversion VFI Technology with advanced IGBT/ PWM technology and Digital Signal processor controls in all aspects i.e. both Charger & Inverter
02.	System Rating	30 KVA / 24 KW
03.	System Configuration	Stand Alone
04	System Control	Total system control to be guaranteed using a redundant Digital Signal processor system. If a fault occurs to either of the Digital Signal processor, the power supply to the protected load must not be interrupted. The digital control system shall improve the overall reliability and efficiency of the UPS, by a reduction in the number of electric components used; The DSP shall control and monitor all of the functions of the UPS using one common control card. The control card to be used across a number of various systems, even systems in different ranges, thereby increasing the productivity and reliability of the range.
RECTIFIER SECTION		
04.	Technology	Digital Signal Processor based,
05.	Input Voltage Rating	380/400 / 415 V, 3 Phase, 4 Wire + Ground
06.	Input Voltage Range	400 V +/-25%
07	Input Frequency & Tolerance	50 Hz. +/-10% auto Adjust
08	Power Walk in/ Soft Start	0 – 100% within 30 Sec.
INVERTER SECTION		
09	Technology	Digital Signal processor based PWM – IGBT based Technology
10	UPS output Power factor	0.8
11	Output Voltage rating	380/400/415V
12	Output Voltage Regulation	+/-1% steady state for static 100% unbalanced load
13	Output Frequency	+/-0.05% free running
	Protection	IP 20
14	Output Harmonic Distortion (Ph./N)	3% THD maximum for 100% linear load 5% THD maximum for 100% non-linear load
15	Crest Factor	3:1 Minimum
16	Voltage Transient Response	+/-3% for a 50% load step, +/-5% for a 100% load step
17	Back feed Protection	The back feed protection device to prevent any current that could cause an electric shock from back feeding to the incoming power supply connections. (EN62040)
18	Voltage Transient Recovery Time	20 milli-seconds to +/-1%

19	LED Mimic Path	To Show Live Power Path
20	UPS Enclosure	To Have Front Access for easy accessibility for Maintenance
21	Phase Displacement	120 Deg. +/-1 Deg. For balanced load 120 Deg. +/- 1 Deg. For 50% unbalanced load 120 Deg. +/-3 Deg. For 100% unbalanced load
22	Overload Capacity (3 phase)	150% for 1 minute in normal operation 125% for 10 minutes in normal operation 110% for 60 minutes in normal operation
23	Output Galvanic Isolation Transformer	To be provided as standard Inbuilt
24	Efficiency	>93% on full load condition
25	Cable Entry	Bottom
BATTERY		
1.	Type and Make	SMF VRLA Batteries Make: Amara Raja / Exide
2.	Battery Charger	Current limiting Max. Voltage 2.33 Volts per cell
3.	Battery Back up	Not Applicable
3 a	Minimum VAH	Not Applicable
4.	Max. Charging Current	10% of AH rating
5	Ripple Voltage	<1%
6.	Charger Temp. Compensator	To be provided for higher battery life and optimum charging of batteries
BYPASS		
1.	Automatic Integral bypass	The Integral bypass shall perform an automatic transfer of the critical load from the Inverter to the bypass, in the event of overload, over temperature or inverter failure conditions with zero transfer time
2.	Internal Manual Maintenance Bypass	To be provided as standard
GENERAL-2		
1.	AC to AC Efficiency	>93% at 100% load in double conversion mode at nominal input voltage with battery fully charged
2.	Acoustical Noise	< 70 dB(A) of noise typical, measured at 1 meter from the operator surface
3.	Output Wave Form	Pure Sine wave
4..	Automatic Restart	Upon restoration of mains AC power, after a mains AC power outage and complete battery discharge, the UPS shall automatically restart and resume supplying power to the critical load and the battery charge shall automatically recharge the battery
DISPLAY		
1.	Metered parameters (LCD Display)	Input Voltage Input Frequency Battery voltage Battery Current (recharge or Discharge) By-pass Voltage Output Voltage Output Frequency Output Current By-pass input voltage

		By-pass output voltage In by-pass mode on inverter mode Number of hours of operation On battery mode First date of activation Temperature of the system Temperature of the rectifier Temperature of the Inverter DC Voltage at the inverter input AC voltage at the inverter output
2.	Event Log	Display a log of status and alarm errors to be provided for up to 120 or more on the front panel display
3.	Controls	Alphanumeric Display Language to English Transfer to or from static bypass operation Test battery condition on demand Calibrate metered parameters
4.	Generator Compatibility	Soft start for use with a generator
5	Software Features	Communication Software: <ul style="list-style-type: none"> ➤ Sequential and prioritized shutdown ➤ Events Scheduling ➤ Message Management ➤ Graphical Monitoring of the UPS Status ➤ Detailed display of all the UPS data ➤ Block diagram and operating diagram of the UPS ➤ Automatic saving of the event log and graphical display Programming the UPS commands
6	Communication Interface Board	Free contacts for Mains fail Static Bypass Battery low
7	Remote UPS monitoring kits	Through SNMP
8	Protection	Output fully isolated from input Built in electronic overloaded Built in electronic short circuit Built in temperature protection MCB/ MCCB protection at Rectifier input MCB/ MCCB protection at Bypass input Over Temperature sensing circuit Battery under voltage Battery Isolator/ Fuse IGBT supervision and indication Output MCB/ MCCB
9	Alarms	Mains fail Low Battery Overload UPS on bypass UPS on Battery
10	Software capability	The UPS shall be capable to communicate with network operating system. Free monitoring software shall be provided along with UPS

11	UPS Manufacturer to have available software for Graceful Shutdown	Windows 95, 98, Me, NT 4.0, Win 2000, Win 2003 Server, XP. - Novell Netware 3.x, 4.x, 5.x, Intra NetWare - IBM OS/2 Warp and Server, - Mac OS, 9.X, OSX IBM AIX, HP UNIX, SUN OS SPARC, SUN Solaris INTEL and SPARC, SCO UNIX and UnixWare, Siemens SINIX, Silicon Graphic IRIX, Compaq True64 UNIX and DEC UNIX, Linux, BSD UNIX and FreeBSD UNIX
GENERAL-3		
12	Warranty	3 Years
13	Specific Working Environment	0 - 50 deg C

Asst. Manager-[ITS]
KEONICS-BANGALORE

Annexure-I

PRICE BID						
Tender No: KSEDCL/ITS/MM/49/2018-19/, Date: 26-02-2019						
Name of Work: "Supply & Installation of 30 KVA On-Line-UPS"						
(Name of the Vendor) :						
Sl. No.	Make & Model	Description	Qty	Basic Price in INR	GST Value	Total Amount in INR
1		30 KVA On-Line-UPS	01			
2		Less Buy back of [Old] 30 KVA On-Line-UPS	01			
Grand Total Amount						
Rupees in Words :						
RATE QUOTED SHOULD BE INCLUSIVE OF ALL TAXES						