



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

AAI/CIA/CNS/PO-29/MODULARUPS/20KVA/ER/2020-21/83

Dated: 31.05.2021

M/s Powerone Micro Systems (P) Ltd,
GF-3, KSSIDC Building,
5th Cross, 1st Stage,
Peenya Industrial Estate
Bangalore- 560058
Email – blrmarketing@poweroneups.com
Mob: 903505053232

Subject: Work Order for SITC of Two numbers of 20 KVA modular UPS at AAI, Cochin Airport.

- Ref.: 1. This office Tender Reference AAI/CNS/VOCI/MODULAR UPS/2020-21 dated 10-02-2021
Tender ID: 2021_AAI_67901_1
2. Your quote ref No. POM/MRR/KGB/AAI-COC/UPS/2020-21/Q-208 dated 10-02-2021.

Sir,

Refer to the above, for the SITC of TWO numbers of 20 KVA MODULAR UPS at Airports Authority of India, Cochin Airport. The competent authority is pleased to approve your above said tender offer for the item specified in the Tender ID: 2021_AAI_67901_1 and as per the specifications described in annexure-A for an amount of Rs 12,36,640/- (Rupees twelve Lakhs Thirty-six Thousand Six Hundred and Forty only) inclusive of all taxes.

Hence you are requested to supply two numbers of 20 KVA Modular UPS, with N+1 redundancy output, with maximum module rating of 50% of rated capacity required, along with necessary control Modules, Status and display system with Battery Banks with 30 minutes power backup as per the specifications contained in annexures A & B attached herewith, at the site of O/o the Airport Director, Airports Authority of India, Cochin Airport at the earliest.

The UPS units with all accessories are to be made available, complete in all respects, for testing (FAT) at your premises within 30 days from the date of this purchase order. The company shall intimate the readiness for inspection in writing/email to the undersigned within this period.

The Installation, Testing and Commissioning at installation site must be completed within 30 days from the date of successful completion of the FAT. All common accessories, if any, shall be supplied along with the UPS sets.

Testing and inspection (FAT)

An expert committee from AAI will visit the factory/service centre of M/s Powerone Micro Systems (P) Ltd. Bangalore to conduct pre-dispatch inspection of the Hardware and Accessories for their conformity to the specifications (FAT). Hence all reasonable facilities and assistance like testing instruments and other gadgets including access to drawings and production data shall be furnished at no charge to AAI. The

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successfully inspected/accepted items shall be sealed in the presence of the inspectors and signed by the inspectors accordingly. Notwithstanding the pre-supply tests & inspections, pre-installation testing at the time of delivery of the equipment and post installation acceptance testing at AAI site are mandatory.

Compensation for delay

If you fail to complete the supply and work within time fixed under the contract, you shall pay to the AAI, without prejudice to any other rights or remedy as may be available to AAI, an agreed compensation amount calculated @1% of the total value of the work per week or part thereof subject to a maximum value equal to the value of the performance bank guarantee.

Annual Maintenance Contract

Party shall be able to provide CAMC after completing warranty period on request.

Performance bank Guarantee

You shall submit an unqualified contract performance guarantee (in lieu of contract performance security) of the value equivalent to 3% of the total price to AAI in the form of an irrevocable and unconditional bank guarantee on scheduled commercial bank as per Performa attached as Annexure-C. The guarantee shall be submitted within 30 days of the issue of letter of acceptance of the bid and will be valid till 90 days after the end of the period of guarantee/warranty.

Payment

The cash bill/invoice for the work may be forwarded to the JGM (CIC), Airports Authority of India, Cochin airport for payment.

Payment terms

1. No mobilization advance shall be paid.
2. The payments shall be released on submission of documents as below.
 - 2.1. Bills (Invoices) in triplicate.
 - 2.2. Delivery Challan
 - 2.3. Receipt from the consignee for completion of delivery in good condition.
 - 2.4. Pre-dispatch & Post -receipt inspection certificate.
 - 2.5. Installation certificates properly signed by AAI representative.

The payment of 100% of the cost of the equipment shall be released after completion of supply, installation, testing, commissioning, training, documentation and site acceptance test as per the order. In the absence of Performance bank Guarantee, the payment shall be made to the vendor after deduction of security Deposit@3% of the value quoted, any applicable tax, other statutory deductions, etc. which the vendor may become liable. The balance 3% will be released after completion of warranty period or after submitting bank guarantee for the 3% of the quoted amount.

The payment shall be through ECS/RTGS. To enable ECS, you shall give the bank account and other details.



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Guarantee /Warranty

Complete Hardware & Software shall be guaranteed against all defects/bugs and for a satisfactory performance for a period of 24 months from the date of successful commissioning of the systems.

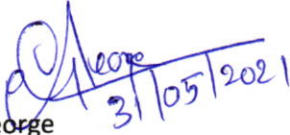
Training

One day Training /familiarization is to be given to eight officials on basic design, operation, periodic maintenance and installation of the systems at Cochin airport on delivery of equipment at AAI premises. Training shall be done before commissioning of the systems and after installation and testing are over.

Submission of documentation

An inventory of the items delivered shall be submitted to AAI. The inventory shall carry item name, make, model, serial number, item number etc.

Yours Truly,


A.I. George
AGM(CNS)
For Airport Director
Airports Authority of India
Cochin Airport.

- Enclosures: 1. List of Items/Price schedule to be supplied-Annexure-A
2. Technical Specifications - Annexure-B.
3. Proforma Bank Guarantee - Annexure-C.

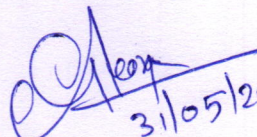
ANNEXURE-A**ITEMS TO BE SUPPLIED & PRICE SCHEDULE.**

Description	Qty (A)	Basic Unit Rate. Rs. (B)	GST @18% for Qty-1 Rs.	Total Amount inclusive of GST
SITC OF 20 KVA Modular UPS, with N+1 redundancy output, with maximum module rating 50% of rated capacity required, along with necessary control Modules, Status and display system, Battery Banks (VRLA SMF BATTERY, Quantity as per UPS Design requirements-vertically arranged in custom made enclosure(s). With minimum 2 Years of comprehensive onsite warranty.	02 Nos.	5,24,000.00	94,320.00	12,36,640.00

Total Amount payable: Rs. 12,36,640.00 (Rupees Twelve Lakhs Thirty-Six Thousand Six Hundred and Forty only) inclusive of all taxes and other charges.

Site Address:

O/o Jt.GM (CIC),
Airports Authority of India
ATS Building,
Cochin International Airport
Nedumbasseri
Cochin- 683 111.


31/05/2021
A.I. George
AGM(CNS)
For Airport Director
Airports Authority of India
Cochin Airport.

ANNEXURE-B**Title: 20 KVA Modular UPS****TECHNICAL SPECIFICATIONS**

UPS Model: 20 KVA Modular UPS, with N+1 redundancy output

Warranty for UPS: 24 months

Warranty for Batteries: 24 months

1.1 General Specifications

Sr. No.	Parameters	Specification Required
1	Rating	20 KVA Modular UPS with (N+1) redundancy
2	UPS Topology	Online Double conversion VFI SS 111
3	Architecture of the UPS	Modular, scalable, maximum module rating 50% of rated capacity required
4	Technology	Multi Controller design, Hot swappable modules, power factor ≥ 0.9 , IGBT based Rectifier & Inverter
5	Output wave form on mains run	Sinusoidal
6	Output wave form on battery run	Sinusoidal
7	Bypass type	Static and eletromechanical
8	Transfer time	Zero ms
9	Cables	The scope of interconnecting UPS with its battery bank/s, including supply of cables shall be done by the supplier. Distance between UPS and its battery bank/s will be approximately 5 metre. The scope also includes interconnecting the UPS system to its input and output panels.
10	Earth connection	The scope of Interconnection to the nearest existing earth strip with appropriate size of insulated earth conductor shall be carried out by the supplier. Distance between UPS and this earth strip is approximately 10 metre.

1.2 INPUT

S.No	Parameters	Specification Required
01	Nominal Voltage	400 V AC, Three Phase & Neutral
02	Voltage Range	- 20% +15%
03	Frequency	45-65 Hz (Auto Sensing)
04	Power Factor	> 0.99
05	THDi	< 3%
06	UPS shall have DG set compatibility	Yes

1.3 Output with mains (AC-AC)

S.N.	Parameters	Specification Required
1	Nominal voltage	400 V ,3 phase + N
2	Nominal power	20 kVA
3	Active power	≥18 KW
4	Output PF	≥0.9
5	Efficiency (AC-AC) (On Line)	Up to 96%
6	Voltage regulation	± 1%
7	THDv on nominal power (linear load)	<3%
8	THDv on nominal power (nonlinear load)	<5 %
9	Frequency	50 Hz +/-0.5 % Hz
10	Current Crest Factor	3:1 accordingly with IEC EN62040
11	Overload capability: @ Unity PF 10 min	115% load rate with no bypass intervention
	1 min	135% load rate with no bypass intervention

1.4 Output in battery run (DC-AC)

S.N.	Parameters	Specification Required
1	Nominal voltage	400 V, Three phase +Neutral
2	Nominal power	20 kVA
3	DC-AC Efficiency	90% or more at full load.
4	Active power	≥18 KW
5	Voltage variation	± 1%
6	THDv on nominal power	< 3 %
7	Frequency	50 Hz
8	Frequency Tolerance	± 0.5% free run
9	Current Crest Factor	3:1 accordingly with IEC EN62040

2 Battery

S.N.	Parameters	Specification Required
1	Type	Lead Acid, SMF
2	Backup	30 min on 20kVA Load
3	Battery AH	minimum battery 12V 65Ah
4	Enclosures	Removable covers to access each battery terminal. Covers should have a spacing of at least 50mm from all sides of battery placed inside 10 mm tolerance space on all side of battery. Enclosure shall be vertically arranged and custom made.

3 ENVIRONMENTAL

S.N.	Parameters	Specification Required
1	Noise Level @ 1m	50-65 dBA
2	Working Temperature range	0 to 40 Degree Celsius
3	Stock temperature range	from -20°C to +50°C (excluded batteries)
4	Humidity range	20-95% not condensing
5	Protection degree	IP20

4 Mechanical and Miscellaneous

S.N.	Parameters	Specification Required
1	Technology rectifier/booster/inverter	IGBT
2	Front panel display	LCD indicating: Operational Status (On-line/by-pass/on battery), Input/ Output voltages, Battery bank voltages, Load percentage
3	Communication Interface	Build in web/SNMP management (full features) via a web browser (Firefox and Internet Explorer)
4	Input/output connections	3P + N + PE Connectors on omega bar
5	Standards	EN 62040
6	Certificates	PEP, CE

Annexure-C

PROFORMA BANK GUARANTEE FOR CONTRACT PERFORMANCE

(To be stamped in accordance with Stamp Act)

(The non-judicial stamp paper should be in the name of issuing Bank)

Ref : _____ Bank Guarantee No : _____

Date : _____

To

The Airport Director
AIRPORTS AUTHORITY OF INDIA
Cochin Airport
Cochin 683 111

Dear Sirs,

In consideration of the Airports Authority Of India (hereinafter referred to as the Owner", which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to M/s _____ (hereinafter referred to as the 'Contractor', which expression shall unless repugnant to the context of meaning thereof, include its successors, administrators executors and assigns), a contract. Bearing _____ No.

dated _____
 valued _____ at

_____ for

and the contractor having (scope of contract) agreed to provide a Contract Performance of the entire Contract equivalent to _____ (10 per cent) of the said value of the Contract to the Owner. We at _____ (hereinafter referred to as the 'BANK', which expression shall, unless repugnant to the context or meaning thereof, include the successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Owner, on demand any and all money payable by the Contractor to the extent of _____ as aforesaid at any time up to _____ (day/month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the owner the Bank shall be conclusive and binding notwithstanding any difference between the owner and contractor or any dispute pending before any court, tribunal or any authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Owner and further agrees that the guarantee herein contained shall continue to be enforceable till the Owner discharges this guarantee. The Owner shall have the fullest liberty, without affecting in any way the liability of the Bank under this guarantee, to postpone from time to time the exercise of any powers vested in then

or of any right which they might have against the Contractor. And to exercise the same at any time in any manner, and either to enforce or to forebear to enforce any covenants, contained or implied, in the Contract between the Owner and the Contractor or any other course of or remedy or security available to the Owner. The Bank shall not be released of its obligations under these presents by any exercise by the Owner or by any other matters or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Owner may have in relation to the Contractors liabilities.

The performance guarantee shall also govern the following Guarantees

a. The Hardware / Software supplied under the contract shall be free from all defects / bugs and upon written notice from AAI, the successful bidder shall fully remedy, free of expenses to AAI, all such defects / bug as developed under the normal use of the said hardware / software within the period of guarantee/Warranty.

b. The performance guarantee is intended to secure the performance of the entire system.

However, it is not to be construed as limiting the damages stipulated in any other clause of tender

Notwithstanding anything mentioned herein above our liability under this guarantee is restricted to Rs. _____ and it shall remain in force up to and including _____

and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s _____ instruction of the buyer.

WITNESS 1

Dated this _____ day of _____ 2010 at _____

Signature _____ Signature _____

Name _____ (Bank's Rubber Stamp)

Official address _____ Name _____

WITNESS 2

Dated this _____ day of _____ 2010 at _____

Signature _____ Signature _____

Name _____ (Bank's Rubber Stamp)

Official address _____ Name _____

Designation with Bank Stamp

Attorney as per Power of

Attorney No. _____

Date _____