

NO.PUR/KSOM/031/2021-LIB

RFID BASED LIBRARY SYSTEM & ITS INTEGRATION SOFTWARE

**KERALA SCHOOL OF MATHEMATICS,
KUNNAMANGALAM, KOZHIKODE - 673571**

Retender Notice No. PUR/KSOM/031/2021-LIB

Sealed tenders are invited on behalf of the Director, Kerala School of Mathematics, Kunnamangalam, Kozhikode from the manufacturers and their authorised dealer/supplier only for supply & installation of the following item:-

Sl. No.	Name of the Items	Name of Department	Indent No.	Qty.	EMD in INR
	Supply, testing and installation of RFID based Library System integrated with Biometric registration software linked with KOHA with the following major Components:				
01	Multi-Purpose RFID Staff / Work Station (Bio Metric)	KSOM Library	KSOM/031/20 21/LIB	1 No	Rs.15000
02	EAS Library Security Gates (2 EAS pedestals) complete in all respect with necessary accessories			1 No.(1Pair of 2 Pedestals)	
03	RFID TAGS			6000 Nos.	
04	Integrated Self Service Kiosk			1 No	
05	Flap Barriers System (Single aisle of Two Panels)			1 No (1 Pair aisle of 2 panels)	
06	Biometric and RFID Interface Software			1 No.	
07	RFID Handheld Reader			1 No.	
08	Central Admin Software			1 No.	

NB: PARTY REGISTERED WITH SSI/DGS&D ARE EXEMPTED FROM PAYING EMD & PERFORMANCE SECURITY.

EMD IN FORM OF DEMAND DRAFT SHOULD BE PREPARED IN FAVOUR OF DIRECTOR, KSOM AND PAYABLE AT KOZHIKODE.

Detail retender Document can also be downloaded from the KSOM web-site address: <http://ksom.res.in>

directly. KSOM reserves the right to accept or reject any or all the tenders without assigning any reason.

Terms & Conditions: -
As per attached sheet

Yours faithfully,

Sd/-

Administrative Officer, KSOM

PART - 1
TERMS & CONDITIONS
FOR SUPPLY AND INSTALLATION
OF
RFID BASED LIBRARY SYSTEM & ITS INTEGRATION SOFTWARE
FOR
KERALA SCHOOL OF MATHEMATICS, KUNNAMANGALAM, KOZHIKODE
TERMS & CONDITIONS

1. Sealed tenders are invited for supply and installation of RFID based Library System & Its Integration Software in the KERALA SCHOOL OF MATHEMATICS, KUNNAMANGALAM, KOZHIKODE. The Tender document consists of the following two parts.
Part-1: "TERMS & CONDITIONS" & "TECHNICAL BID" of the Tender. Part-2: "FINANCIAL BID" of the Tender.
2. The bidder must attach the experiecem (3 years) for Supply & Installation of above equipments in State Government or GoI/GoK Department(s) /Reputed Organisation(s) . Please attach a list of clients.
3. The bids submitted by the vendors should be valid for a minimum period of 90 days from the date of the opening of Tender and the prices should be valid till execution of purchase agreement.
4. The sealed envelope containing "Terms & Conditions", "Technical Bid" and "Financial Bid" on prescribed Tender document of the KERALA SCHOOL OF MATHEMATICS should reach the Administrative Officer, Kerala School of Mathematics, Kunnamangalam - 673571, Kozhikode, Kerala on or before 04.03.2021 up to 3:30 p.m. otherwise the Tender will not be accepted.
5. The sealed envelope of the bidders containing "Terms & Conditions, Technical & Financial Bid shall be opened on 04.03.2021 at 4.00 P.M.
6. For further information/clarification in this respect, please contact on e-mail director.ksom@gmail.com / rajesh@ksom.res.in . Only e-mail inquiries will be entertained.
7. The supply and installation of the above equipment shall be made by the vendor within 4 -6 weeks from the date of issue of the purchase order.
8. All the items to be supplied should be new, of good quality and standard and as per the technical specifications mentioned in technical bid document.
9. The vendor will provide operational manuals, OEM documents for peripherals, set of diagnostics to test all the sub-systems etc. along with the systems.
10. The installation of above equipments will be at **Kerala School of Mathematics, Kunnamangalam, (Opp.CWRDM), Kozhikode – 673571, Kerala.**
11. The prices quoted in the technical/financial bid should be inclusive of power cables, interface cables, packing, forwarding, freight upto KSOM, Kunnamangalam - 673571, Kozhikode, Kerala , transit insurance and installation charges at sites. Trade tax /GST applicable should be quoted separately at the appropriate columns provided for them in the technical/financial bid.

12. In case, of Trade tax/GST are reduced or increased subsequently by the Government at the time of placement of the purchase order or delivery, then the same will be adjusted by either party on production of requisite proof.

13. Payment for the items to be supplied by the vendor against the purchase order shall be made by Kerala School of Mathematics as follows:-

100% payment will be made after successful installation by NEFT / RTGS.

No terms for advance payment will be entertained / accepted.

The Tenderers who are not agreeing to above payment terms, are requested not to submit their Tender otherwise their EMD will be forfeited.

14. The equipments will carry three years on site comprehensive warranty. Warranty period will start from the date of successful installation of all the items at site.

15. Parties should specify the make and model of each Item along with all other details.

16. The Tender must be submitted on the prescribed Tender document issued by the KERALA SCHOOL OF MATHEMATICS. Any other technical details required to supplement the information quoted in the prescribed Tender document may please be attached separately. The information asked in the Tender document should be given at the place provided for it in the Tender document. The Tenders in which information is not given at the place provided for it or not in the similar format given in the Tender document may be rejected.

17. All the documents required should be submitted along with the technical bid of the Tender only.

18. Printed conditions of the vendor submitted with the Tender will not be binding on KERALA SCHOOL OF MATHEMATICS.

19. The documents containing bids shall be free from cutting and erasures. However, alterations, if any, in the Tender should be attested properly by the bidder, failing which the Tender is liable to be rejected.

20. The Tenders submitted by telex/telegrams/fax/email will not be considered. No further correspondence will be entertained on this matter.

21. KERALA SCHOOL OF MATHEMATICS will not be responsible for any delay in obtaining the Tender document by the vendor from KERALA SCHOOL OF MATHEMATICS or submission of the completed Tender document to KERALA SCHOOL OF MATHEMATICS.

22. The registration number of the firm along with the GST/VAT No. allotted by the GST / trade tax authorities and I.T. registration number (P.A.N.) along with the place of registration should invariably be given along with the technical bid.

23. Tender will be rejected, if technical specifications offered by the firm in the bid differ from that of financial bid.

24. The bidder shall submit an affidavit that the bidder's firm has not been black listed from State Government/Government of India. The bids of the black listed bidders shall be out rightly rejected.

25. Tender not conforming to any or all the above terms and conditions will be rejected.

26. Incomplete Tenders are liable to be rejected.
27. KERALA SCHOOL OF MATHEMATICS reserves the right to increase/decrease the specified quantities of any item(s) given in the Tender.
28. KERALA SCHOOL OF MATHEMATICS reserves the right to reject any or all the Tenders without assigning any reason whatsoever. KERALA SCHOOL OF MATHEMATICS would not be under any obligation to give any clarifications to those vendors whose Tenders have been rejected. The decision of Director, KSOM is final and binding in case of any dispute arising out of this contract between both the parties.

Sd/-
Administrative Officer
KSOM

DECLARATION BY THE VENDOR

It is hereby declared that I/We the undersigned, have read and examined all the terms and conditions etc. of the Tender document for which I/We have signed and submitted the Tender under proper lawful Power of Attorney. It is also certified that all the terms and conditions of the Tender document are fully acceptable to me/us and I/We will abide by the conditions from serial no. 1 to 30. This is also certified that I/We/our principal manufacturing firm have no objection in signing the purchase contract if the opportunity for the supply of the items against this Tender is given to me/us.

Date:

Signature:

Address:

Name:

Designation:

On behalf of:

(Company Seal)

PART - 1
FOR SUPPLY AND INSTALLATION OF
RFID BASED LIBRARY SYSTEM & ITS INTEGRATION SOFTWARE
FOR
KERALA SCHOOL OF MATHEMATICS, KUNNAMANGALAM, KOZHIKODE

General Information

1.	Name of the Company	
2.	Full address of company alongwith Telephone no. Fax no. E-mail address :	
3.	Local address of company for communication, if any	
4.	Are you a manufacturer or dealer/reseller	
5. (a)	Supply & Installation of equivalent to our Tendered OF RFID Based Library System & Its Integration Software last 3 financial years in State Government or Govt. of India Department(s) /Reputed Organisation(s) (Please attach list of clients.	
5.(b)	Trade Tax / GST Registration no. with Place	
5.(c)	Income Tax Registration no. with place	

**SUPPLY AND INSTALLATION
OF
RFID BASED LIBRARY SYSTEM & ITS INTEGRATION SOFTWARE
FOR
KERALA SCHOOL OF MATHEMATICS, KUNNAMANGALAM, KOZHIKODE
TECHNICAL SPECIFICATION**

S. No.	Item Specification	Offered specification with Make & Model No. please specify any deviation if any. Please attach separate sheet if required																				
(1)	(2)	(3)																				
	RFID based Library System & Its Integration Software (PUR/KSOM/031/2021/LIB)																					
1	<p>Supply, testing and installation of RFID based Library System integrated with Biometric registration software linked with KOHA.</p> <p>Item Specification: Compatibility with Biometric registration software linked with KOHA. All the RFID components chosen for complete solution must conform to ISO-15693 / ISO-18000-3 /ISO 28650 - The solution comprises of the following major components:</p> <p>1. <u>Multi-Purpose RFID Staff / Work Station (Bio Metric):</u></p> <p>Read/Write/Anti-theft programming should be done in one single operation - Biometric Enabled for staff station - Biometric registration software linked with KOHA - In the registration software, after providing student details, automatically biometric device should be activated to capture fingerprint -While issuing, patron will be identified using biometrics only on the circulation software. - Read/Write distance of Up to 35 cm and programming time of 1 second – Compatible with OS KOHA</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Parameter</th> <th style="text-align: center;">Technical Specifications</th> </tr> </thead> <tbody> <tr> <td>Operating Frequency</td> <td>13.56 MHz ± 7 kHz</td> </tr> <tr> <td>Power Supply</td> <td>12V</td> </tr> <tr> <td>Power</td> <td>1.2W minimum</td> </tr> <tr> <td>Read Range</td> <td>Up to 35 cm</td> </tr> <tr> <td>Communication Interface</td> <td>USB/RS232/Ethernet</td> </tr> <tr> <td>Supported Transponders</td> <td>ISO 15693 and ISO 18000:3</td> </tr> <tr> <td>Indicators</td> <td>LED for power, read verification etc.</td> </tr> <tr> <td>Baud Rate</td> <td>26.5 kbps</td> </tr> <tr> <td>Operating Temperature</td> <td>-10°C to +70°C</td> </tr> </tbody> </table>	Parameter	Technical Specifications	Operating Frequency	13.56 MHz ± 7 kHz	Power Supply	12V	Power	1.2W minimum	Read Range	Up to 35 cm	Communication Interface	USB/RS232/Ethernet	Supported Transponders	ISO 15693 and ISO 18000:3	Indicators	LED for power, read verification etc.	Baud Rate	26.5 kbps	Operating Temperature	-10°C to +70°C	
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2. EAS Library Security Gates (2 EAS pedestals) complete in all respect with necessary accessories :

Security gate should be at least 1800mm tall - Two pedestal with 13.56 MHz frequency range - Phase Change (patented technology) real 3D detection (Should not Interdependent one another) - EAS - Electronic Article Surveillance on detection system sounds an alarm, different types of Tag ID, date and time are stored - To be linked to the KOHA database and provide complete book information on the gate software - Security gate should detect any unauthorized books going out and generate an alarm for the same.

Parameter	Technical Specifications
Operating Frequency	13.56 MHz
Power Supply	AC 230V / 50Hz
Power consumption	30W maximum
Transmitting Power	6 W RF Power
Read Range	Up to 1 m with pair of gates
Communication Interface	RS232/Ethernet
Supported Transponders	ISO 15693, I Code
Operating Temperature	-10°C to +70°C
Alarms	Lights and buzzer
People Counter	Counts in/out traffic
Communication Parameters	Baud Rate: 115200 Kbps

3. RFID TAGS :

The RFID chip used in the tag should have been designed specifically for Library use. i.e. it should have three sections - Lockable section for item identification - Re-writable section for library specific use - Security function (EAS) for item anti-theft (which can be activated and deactivated) - The RFID chip should have multi read function, i.e. several tags can be read at the same time - Tag size should be 81mm x 49mm with at least 2kb memory, multi-read and anti-theft - Integrated Circuit (IC) NXP ICode SLIX - Tags Air interface protocol should be ISO 15693, ISO 28650 and ISO 18000-3 compliant with supporting proof - Life time replacement Guarantee of Tags and replacement of defective tags if found during first time tagging - Enclose specimen of Tag.

4. Integrated Self Service Kiosk :

RFID Integrated - Biometric for patron Identification - Student photo to be displayed during transaction - Book issue, book return and book renewal functionality - 80mm Receipt printer

Mechanical Specifications:	
Make	Metal and acrylic
Aesthetics	Dual color based on library interior

Hardware:	
RFID transponder supported	ISO15693; ISO18000
Input voltage	230V
Output	12V DC
Transmitting power	1.2W max
Read distance [iso15693]	35 to 40cm
Patron identification method	Biometrics

5. Flap Barriers System (Single aisle of Two Panels):

Only authorized user in KOHA will be allowed in the flapbarrier - If user is blocked, the card will immediately stop working at flapbarrier - Only after communicating with KOHA, the flapbarrier should allow user to enter or exit - Every entry and exit is recorded - Statistics and reports are provided - On showing the biometrics or RFID cards, the flap should operate - The flap should be compatible with biometrics also - Designed for pedestrian entrance control, it helps to control and secure access, allowing only one person through at a time - Having Infrared sensors -The barrier can be set to delay closing after valid card reading - lane and passage width <550mm - Always free or locked - Bi-directional operation can be used for both entry & exit - Lane indicator displays whether passage is barred or free - Power supply 100-240v AC. Motor voltage 24V DC.

6. Biometric and RFID Interface Software :

Interface software to link biometric registration to KOHA – Egates software integrated with biometrics linked with KOHA - Biometric registration done at one counter should sync to all the devices, for easy operations - Tagging, re-tagging and un-tagging of books - Circulation of books - Circulation should be activated only through biometrics

7. RFID Handheld Reader:

Stock control can be used to do stock check and search misplaced books - Stock report could be integrated with LMS database - Location check/shelf management option can also be configured - This product has inbuilt Wi-Fi which can connect directly to laptop or through the local network - Through network, it enhances the connecting distance - RFID inventory reader uses fast – read performance to simultaneously - interrogate between 15 to 20 items per second - The search option is very useful to the student as staff can find the books easily - Stock device would also be able to find any duplicated books inside the library - This can also be used to find any book inside the library, which is already issued - Software Components: supply of compatible software for laptop & PC - Features: Long lightweight handheld - performs stock-checking, re-shelving, and also locates specific items, sorting and monitoring of library material on shelf along with locating misplaced documents - To locate items that is out place on the shelves - Operating Frequency: 13.56 Mhz - Power Supply: 5V/ 3 Amp DC Adopter - Read Range: Upto 35 Cms - Transmitting Power: 4 W min - Power boost mode for inventory on steel rack - Software should have abilities to - (i)find misplaced book - (ii)find duplicate - (iii)identify issued books if there are any in library (iv)Complete stock check

8. Central Admin Software :

RFID central admin software implemented should have the following functionalities - RFID Central Admin controls all the RFID products installed across the site - It provides options to monitor live transactions, get reports of all software's day wise from anywhere - Monitor Live Transactions from anywhere - Get specific details of transaction - happening instantly - Get Report instantly - Can view statistics of each software day wise - Easy navigation with clear UI - All the products to be supplied should be integrated with this software aswell as KOHA.

Acceptance Criteria:

1. Complete Library Management System with existing and new features based on RFID technology, must be fully installed, tested, commissioned and demonstrated.
2. Training must be provided to Library staff for operation and routine management.
3. All components of the system must be fully integrated and should operate as a single system catering to all operational needs of the Library Data Management.

Technical terms & conditions for RFID based solution:

1. The supplier must ensure that all RFID hardware components deployed in setting up the complete solution must have certification from an accredited agency.
2. The supplier shall supply and integrate all the necessary components with KOHA software or offered library management software and LAN in the KSOM. All the RFID components chosen for solution must conform either to ISO standards. Applicable standard must be clearly mentioned in the offer.

	<ol style="list-style-type: none"> 3. The vendor must train the library staffs thoroughly to enable them to operate the system and also carry out any routine modifications. Technical support must be provided during office hours on all working days. 4. RFID tags must be tamper proof. 5. RFID reader must be capable of multiple read and write for repetitive duty operations. 6. KSOM logo (provided by KSOM) must be printed on each RFID tag. 7. The complete RFID system must have the necessary capacity of further improvement in its functioning. <p>Other General Specification</p> <ol style="list-style-type: none"> 1. The bidder must have at least 3 years of experience in the same field. 2. LAN & WAN enabled client/ web server interface. 3. Multi-user, user friendly and multilingual 4. ANSIZ39.50 Compliant 5. Supports windows / Windows NT/ Linux 6. Finger print device (Option) 	
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Note: - Parties must mention make & model no. of the equipment offered by them, with detailed specification (on separate sheet). Otherwise their Tender will not be accepted.

FINANCIAL BID
FOR SUPPLY AND INSTALLATION OF
RFID BASED LIBRARY SYSTEM & ITS INTEGRATION SOFTWARE
FOR
KERALA SCHOOL OF MATHEMATICS, KUNNAMANGALAM,
KOZHIKODE

Sl. No.	Systems	Qty.	Unit Price in INR	Unit Price including all taxes, freight and Insurance (delivered at KSOM, Kunnamangalam, Kozhikode service charges, installation and warranty charges in INR
(1)	(2)	(3)	(4)	(5)
1	Supply, testing and installation of RFID based Library System and its integration with Library Management Software with following components:, PUR/KSOM/031/2021-LIB Detailed technical specification as per technical bid.			
1	Multi-Purpose RFID Staff / Work Station (Bio Metric)	1 No		
2	EAS Library Security Gates (2 EAS pedestals) complete in all respect with necessary accessories	1 No.(1Pair of 2 Pedestals)		
3	RFID TAGS	6000 Nos.		
4	Integrated Self Service Kiosk	1 No		
5	Flap Barriers System (Single aisle of Two Panels)	1 No (1 Pair aisle of 2 panels)		
	Biometric and RFID Interface Software			
6	RFID Handheld Reader	1 No.		
7	Central Admin Software	1 No.		
8		1 No.		
Grant Total (Bid Amount) :				
2.	Above item should carry three years onsite comprehensive warranty. In case the Tendered provide warranty less than 03 years, annual maintenance cost for the short fall warranty period up to 3 years will be added to the bid price. Without warranty, the Tender is liable to be rejected.			
3	Post warranty period maintenance charges; (Excluded from Bid – acceptance subject to discretion of KSOM)	Amount		
	Additional 02 years Warranty Charges :			
	AMC charges :	_____ . _____%		

ALL ABOVE ITEMS ON 3 YEARS FULL COMPREHENSIVE FREE WARRANTY.

Date:
Address:

Signature:
Name:
Designation:
On behalf of:

(Company Seal)