## (UP-DEVISED TECHNICAL SPECIFICATIONS)

## BID NO: PBM 2024-16

DATE:			
REQUIRE	D SPECIFICATIONS	OFFERED	REFERENCES
		SPECIFICATIONS	(Include
		(please write down	supporting
		detailed offered	documents)
		specifications)	(attached
			brochure/technical
			data/website, etc.
LOT 1 S	MART DIGITAL SECURITY GATE SYSTEM AND DIGI	ΓAL LIBRARY SEL	<b>F SERVICES</b>
Item 1: Or	ne(1) Unit UHF SECURITY GATE	Indicate the Brand	
A.) Ha	rdware and Software Specifications	and Model	
•	All in One Design: With built in control box, LED Status,		
	Motion Sensor, RFID Antenna, RFID Reader, Counter		
	Sensor, Audio Status		
•	Two (2) Panels One (1) Lane		
	Light Diffusion Acrylic Design: Controllable RGB LED		
· ·	Lighting that can lit-up to display hundreds of different colors		
•	Range from Size: 170-185 cm height, 35-75 cm width, 9-15		
-	cm depth		
•	Operating Frequency: 918-928 MHz, ISO 18000-6C, EPC		
•	RFID Tag Compatibility: UHF 860-960 MHz, ISO 18000-		
	6C, EPC Class 1 Gen 2		
•	Material: PVC and Acrylic		
•	Alarm Indicators:		
•	Visual: Flashes the color Red at the dual security gate system		
	when Spotting unchecked items taken out of library		
•	Audio Alarm: A Talking dual gate audio system that		
	commands and gives instructions to user once alarm is		
	triggered		
٠	Communication: TCP/ IP or USB		
٠	Detection Orientation: Horizontal, Vertical, Diagonal (3D		
	Dimensional)		
•	Detection Range: up to 3 meters		
•	Input Power -: 220 volts		
•	UPS		
B.) FE	ATURES		
,	Orientation: Insensitive library asset read zone		
	Multiple library assets processing capability		
	Long Range Detection: For up to 3 meters		
	Visual and Audio Theft Preventive Alarms		
5.	Movement Directional and Counter Sensors		
6.	Controllable RGB LED Lighting		
7.	Stand-alone operation during blackout		
8.	Real time monitoring and report generation		
9.	Connectivity with LMS via SIP2 protocol or API		

<b>10.</b> Library assets - Books, Tape, CD/DVD, Video Ca	Issette	
will not be damaged during passing gate		
Integration with CCTV Surveillance System Integration with Gate	th Flap	
Item 2: One(1) Unit FLAP ACCESS BARRIER		
Steel Flap Material: Acrylic		
Drive Motor : DC brushless motor		
Channel Width : 500-600mm		
• Pass Speed : 40 Persons/Min.		
Power Supply : 220Vac 50Hz or 110Vac 60Hz		
<ul> <li>Input Interface : Switch Volume or 12V Level</li> </ul>		
Gate Open while Power Off : Yes		
Communication Interface : RS485		
• UPS : 1000V A		
Identification Compatibility : Omidirectional Barcode S		
Codaber (NW7), Code11, Code128, Code32, Code39, Co		
93&93i, GS1 Standard, (formerly EAN/UCC) Cont	actless	
<ul> <li>Smartcard Reader: ISO 14443A, ISO15693</li> <li>Product Size : 1400*300*1000mm (maximum)</li> </ul>		
Material : SUS 304 Stainless Steel     Thiskness - Tage 1 France back 1 Opport		
<ul> <li>Thickness : Top:1.5mm+body 1.0mm</li> <li>Passage Direction : Single Directional/Bi-directional</li> </ul>		
<ul> <li>Sensor : 3 Pairs of Active Infrared Intrusion Detector</li> </ul>		
<ul> <li>Throughput Rate : 30~35p/m</li> </ul>		
<ul> <li>Reaction Time : 0.2S</li> </ul>		
Driving Voltage: DC24V 6.25A		
Mechanism : Half High Flap Gate Mechanism		
<ul> <li>Back-up Power : Supercapacitor(12V/3A)</li> </ul>		
<ul> <li>Indication : LED Direction Indication</li> </ul>		
Acoustic Alarm : Buzzer Alarm		
LED : Triple Color LED One Lane / two panels		
<b>FEATURES</b> <b>1.</b> Provide normally open / normally close to satisfy		
management request		
<b>2.</b> Compatible with RF card readers, barcode readers		
3. Equipped with infrared photocell, alarm while unaut	thorized	
entry or tailgating attempts, together with anti-str	rike	
function to protect pedestrian		
<b>4.</b> Lock automatically while the pedestrian not pass the		
the pre- set time after the flap opened. The passing adjustable	time is	
<b>5.</b> Support gate open while power failure and recover	N/C	
mode after power on		
6. Reversed passing alarm function, barrier will alarm i		
pedestrian pass from opposite direction after readir	ng the	
card		
7. Real time monitoring and report generational		

8. Connectivity via LMS or other	
9. Designed to control pedestrian entering and exiting, double	
brushed surface treatment, dust-proof, rustproof, rainproo	
design, suitable for indoor and outdoor use, easy to integrate	
with other read/write devices	
Item 3: One(1) Unit UHF RFID STAFF STATION	
• All in One Design – LED Status, USB Port, Computer Connect,	
RFID Reader Barcode Scanner, Shelve Antenna	
• Operating Frequency – UHF 918-928 MHz, ISO 18000-6C, EPC	
Class1 Gen2	
• RFID Tag Compatibility – UHD 860-960 MHz, ISO 18000-6C, EPC	
Class1 Gen2	
Material Casing – PVC and Acrylic	
Security Mode – AFI, EAS	
Communication – TCP / IP or USB	
Functions – Read / Write	
<ul> <li>Detection Range - &gt; 30 cm Input Power – 220 volts</li> </ul>	
FEATURES	
1. Manage member and Library assets	
2. Multilingual Graphical user interface specifically English	
3. Orientation: Insensitive library asset read zone	
4. Multiple library assets processing capability	
5. Connect with computer or laptop	
6. Software: Tagging and Read Mode via LMS	
7. Software: Borrow and Return Mode via LMS Connectivity	
with LMS via SIP2 Protocol or API	
Item 4: One(1) Unit INVENTORY HANDHELD READER • Touchscreen 1.1mm Thickness Tempered Glass/ 10-dot; 1D/ 2D	
<ul> <li>Barcode Scanner; Hot Swapping Battery Pistol Style</li> </ul>	
<ul> <li>Operation System: Android 12.0 minimum</li> </ul>	
<ul> <li>CPU: Quad Core Cortex - A17/1.8 GhZ</li> </ul>	
<ul> <li>GPU Arm Mali-T764/High Performance 3D Engine</li> </ul>	
<ul> <li>RAM+ROM 2G +32G</li> </ul>	
<ul> <li>LCD 5.0 Inches/1280×720/IPS/180deg View Angle</li> </ul>	
<ul> <li>Size 160mm×82mm×129mm maximum</li> </ul>	
<ul> <li>Weight 640g Battery Included maximum</li> </ul>	
<ul> <li>Read Distance &gt; 8m or better</li> </ul>	
<ul> <li>Audio Large Speaker Stereo System</li> </ul>	
<ul> <li>Vibration Button Style 10mm Diameter</li> </ul>	
<ul> <li>Protocol ISO / IEC 18000-6C 6B EPC Global c1 Gen 2</li> </ul>	
<ul> <li>Frequency: 918-928 MHz</li> </ul>	
UHF Antenna 3dBi.	
<ul> <li>Peak Inventory Speed &gt;500 Tags</li> </ul>	
Output Power 0-33dBm	
Charge Indicator - Bicolor LED	
WiFi/ Bluetooth /4G	
USB Interface Micro USB/Molex Connection /Operating Life	
10,000 Cycles	

<ul> <li>Card Slots Nano Sim Card slot /TF Card Slot</li> </ul>	
<ul> <li>Power 6,000 mAh Chargeable Li-polymer Battery</li> </ul>	
Buttons Power / Volume	
FEATURES	
<ol> <li>POWERFUL Hardware Configuration to ensure applications like Massive Data Collection, 3D Real-Time Display</li> <li>Top class materials like CNCaluminum, PC+Abs body with 1.1 mm thickness tempered glass, excellent heat dissipation plus electromagnetic shielding features</li> <li>Industrial grade components plus super long-life cycles</li> <li>Ultra-long operating time</li> <li>High End UHF RFID Engine</li> <li>Best performance and excellent multi tag identification ability</li> <li>Outstanding industrial design</li> <li>Excellent Mechanical Protection</li> <li>Safe drop height 1.6m with IP64 protection grade</li> <li>Book Inventory; Book Search; Book Management function</li> </ol>	
use with UHF RFID System	
<ul> <li>Item 5: One(1) Unit UHF RFID SELF CHECK KIOSK</li> <li>Operating Frequency : UHF 920-928 MHz (Philippines) ISO 18000-6C, EPC Class1 Gen2</li> </ul>	
<ul> <li>RFID Tag Compatibility : UHF 850-960 Mhz, ISO 18000- 6C, EPC Class1 Gen2</li> <li>Security Mode : AFI, EAS</li> <li>Display: 23" LED Capacitive Touch Screen (Full HD 1920x1080 @60Hz</li> <li>Audio : Stereo</li> <li>Camera: Front Camera Photo (Up to 5MP)</li> <li>Receipt Printer: Direct Thermal with Auto-Cutter Print resolution</li> </ul>	
<ul> <li>203 dpi, Print Speed up to 300 mm./sec</li> <li>Identification Compatibility : Omidirectional Barcode Scanner: Codaber (NW7), Code11, Code128, Code32, Code 39, Code 93&amp;93i, GS1 Standard, (formerly EAN/UCC) Contactless Smartcard Reader: ISO 14443A, ISO15693</li> <li>Detection Range : &gt;30cm</li> <li>Communication : TCP/IP</li> </ul>	
<ul> <li>Input Power : 220 Volts</li> <li>Compliance : FCC/CE/EN/ESTI/</li> </ul>	
<ol> <li>Borrow, return and renew library assets with touch interactivity</li> <li>Multi lingual graphical user interface</li> </ol>	
<ol> <li>Multi-lingual graphical user interface</li> <li>Orientation inconsitive library asset road zone</li> </ol>	
<ol> <li>Orientation-insensitive library asset read zone</li> <li>Multiple library assets processing capability</li> </ol>	
<ol> <li>Multiple library assets processing capability</li> <li>User authentication via advanced identification technology</li> </ol>	
5. User authentication via advanced identification technology	
6. Proof of transaction via physical and electronic receipt	

	7. User image captur			
		ing and report generation		
		tion during power failure I and user guidance tool		
		at least 200 dpi and can cut paper		
	automatically			
	12. All in one self-serv	ice library kiosk		
Item 6	: Three(3) Units BOOI	K RETURN KIOSK		
•	Operating Frequency 16000-6C, EPC	: UHF 920-926 MHz (Philippines) ISO		
		Class1 Gen2		
•	RFID Tag Compatibility	/: UHF 660-960 MHz ISD 18000-6C, EPC		
	Class1 Gen2			
•	Security Mode	: AFI, EAS		
٠	Display	: 23" LED Capacitive Touch Screen (Full		
	HD			
		1920x1080 @ 60Hz)		
٠	Audio	: Stereo		
٠	Camera	: Front Camera Photo (Up to 3MP) Inside		
	Camera			
		Photo (Up to 3MP)		
•	Receipt Printer	: Direct Thermal with Audio-		
	Cutter Print resolution	on		
		203 dpi, Print Speed up to 300		
	mm/sec			
•		ibility : Barcode and QR Code Scanner		
	Codaber			
		(NW7), Code11, Code128, Code32,		
	Code39, Code			
		93&93i, GS 1 Standard, (formerly		
	EAN/UCC)			
		Contactless Smartcard Reader Mifare		
	1356			
		Mhz ISO 14443A, ISO15693		
٠	Sensor	: Auto Shutter Sensor, Smart		
	Conveyer Sensor, Bo	ook		
		Bin Sensor		
•	Communication	: TCP/IP		
٠	UPS	: 1000 VA		
٠	Input Power	: 220 Volt		
٠		: FCC/CE/EN/ESTI/		
FEAT	URES			
٠	-	vith touch interactivity		
•	Multi-lingual graphical			
•	Multiple library assets			
•	User authentication vi	a advanced identification technology		

4.1 Display banner slides		
4.2 Display information sections		
4.3 Display "how to book"		
5. System Language		
5.1 Support multiple languages		
6. Access log system		
6.1 System usage log		
6.2 Room booking log		
7. Integration System		
7.1 Integrate with 3 <sup>rd</sup> party member authentication system		
<ul> <li>7.2 Can integrate with 3<sup>rd</sup> party system via API necessary</li> <li>7.3 Real-time data exchanges between systems and devices</li> <li>FRONT-ROOM DEVICE</li> <li>1. Device Main Functions</li> </ul>		
1.1 Member		
1.2 Booking		
2. Information Display System		
2.1 Display room availability		
2.2 Display next booking		
<ul><li>2.3 Display time up soon booking</li><li>2.4 Clear user interface design using appropriate color indications</li></ul>		
book occupied room, available room etc.		
2.5 LED bar to indicate occupied room, available room etc.		
3. Check-in System		
3.1 Check-in using Mifare / QR Code / Barcode / PIN		
3.2 Check-in with existing member cards		
3.3 Cancel booking automatically if not check-in within specified check-in		
time		
3.4 Capture user picture when checking-in		
4. Access Control System		
4.1 Can control electromagnetic lock open / close		
5. System Language 5.1 Support multiple languages		
5.1 Support multiple languages		
6. Integration System		
6.1 Integrate with 3 <sup>rd</sup> party member authentication system		
6.2 Can integrate with 3 <sup>rd</sup> party system via API as necessary 6.3 Real-time data exchanges between systems and		
devices 7.Access Log System		

7.1 Room usage log IN-ROOM DEVICE	
1.Manage Booking System	
<ul><li>1.1 Display current booking</li><li>1.2 Alert prior to end of booking time</li></ul>	
1.3 Extend room booking time	
1.4 End booking time early	
1.5 Contact support 1.6 Satisfaction survey	
<ol> <li>System Language</li> <li>Support multiple languages</li> </ol>	
3.Integration System	
3.1 Integrate with 3 <sup>rd</sup> party member authentication system	
<ul> <li>3.2 Can integrate with 3<sup>rd</sup> party system via API as necessary</li> <li>3.3 Real-time data exchanges between systems and devices</li> <li>BACK-END STAFF SYSTEM</li> </ul>	
1. Login System	
1.1 Login page	
1.2 Login permission authentication	
1.3 Access log	
2. User Permission System	
2.1 Add, edit, and delete user permissions	
3. Rook Booking System	
3.1 Add, edit, and delete locations	
<ul><li>3.2 Add, edit, and delete rooms</li><li>3.3 Add, edit, and delete room details such as room description,</li></ul>	
location, amenities, booking conditions, and maximum occupancy	
3.4 Can authorize or reject booking 4. Contact Support System	
4.1 Support dashboard	
4.2 User help pop-up notification alert	
4.3 Help request details	
5. Satisfaction Survey System	
<ul><li>5.1 Survey report dashboard</li><li>5.2 Add, edit, and delete survey questionnaires</li><li>5.3 Export survey report in word, excel, and PDF</li></ul>	
6. Banner Slide System	
<ul><li>6.1Add, edit, and delete banner slides</li><li>6.2Set time to show or hide banner slides</li></ul>	
7. Reporting System	

7.1 Dashboard reports	
7.2 Room usage reports	
7.3 User reports	
7.4 Statistical reports	
7.5 Filter and sort reports	
7.6 Export reports in word, excel, and PDF	
8. Staff Management System	
8.1 Add, edit, and delete staff	
8.2 Login permission restriction	
8.3 Permission setting	
9. System Language	
9.1Support multiple languages	
10. Integration System	
10.1 Integrate with 3 <sup>rd</sup> party member authentication system	
<ul> <li>10.2 Can integrate with 3<sup>rd</sup> party system via API as necessary</li> <li>10.3 Real-time data exchanges between systems and devices</li> <li>11. Access Log System</li> </ul>	
11.1 System usage log	
11.2 Room booking log	
11.3 Reporting log	
<ul> <li>11.3 Reporting log</li> <li>11.4 Exporting in word, excel, and PDF</li> <li>HARDWARE <ul> <li>1 Unit LCD INTERACTIVE WHITEBOARD</li> <li>-At least 49" min; HD resolution remote session interactive teaching wireless</li> <li>transmission screen, multi touch</li> <li>-At least Smart rotation split screen, video conference, 10 point</li> </ul> </li> <li>touch <ul> <li>-At least Windows and android, MAC OS</li> <li>-At least 4GB RAM, 32 GB ROM, 4K resolution preferred</li> <li>-At least with moving bracket</li> <li>1 Unit ANDROID TABLET WITH LIGHT BAR</li> <li>-At least 10" with touch screen</li> <li>-At least CPU RK3566 Quad core, cortex A55 1.8G hz, RAM 4GB internal memory 64GB</li> <li>-At least OS android 11 Minimum, 10 points touch resolution1280x800 minimum)</li> <li>-At least Network Wifi Ethernet, Bluetooth</li> </ul> </li> </ul>	
- Interface USB Card slot, RJ45, media play audio and video	
format	
1 Unit L-SHAPED ANDRIOD TABLET	
-At least 10" with touch screen minimum -At least CPU RK3566 Quad core, cortex A55 1.8G hz, RAM 4GB	
internal memory 64GB	
-At least OS Android 11 minimum, 10 points touch resolution	

1280x800 minimum		
-At least Interface USB Card slot, RJ45, media play audio and		
video format		
-At least Network WiFi Ethernet, Bluetooth LOT 2 30,000 pcs. UHF RFID TAGS		
Specifications:		
<b>1.</b> Operating Frequency: UHF 918-928 MHz, ISO 18000- 6C, EPC		
Class1 Gen2		
2. Operating Mode : Passive		
<b>3.</b> Functionality : Read/Write		
4. Memory : EPC 256 Bits, User Memory 512 Bits, Unique TID 96 Bits, Kill Password 32 Bits		
<ol> <li>RFID Tag Compatibility: UHF 860-960 MHz, ISO 18000-6C, EPC Class1 Gen2</li> </ol>		
<b>6.</b> Security Mode : AFI Bits, EAS Bits		
7. Data Retention : 10 years minimum		
8. Programming Cycles : 100,000 Cycles		
<b>9.</b> Label Size : 160x8mm maximum		
<b>10.</b> Antenna Size         :         157x3.5mm <b>11.</b> Delesse Lisse Size         172. 8 mm		
<b>11.</b> Release Liner Size : 178x8mm		
<b>12.</b> Inlay Substrate : Special PET		
<b>13.</b> Antenna Material : Silver		
<b>14.</b> Conductive Ink : Double Sided Adhesive		
<b>15.</b> Operating Temperature: -40 <sup>C</sup> to +70 <sup>C</sup> , Storage Temperature -		
25 <sup>C</sup> to 50 <sup>C</sup>		
FEATURES		
<ol> <li>918-928 MHz Frequency Optimized</li> <li>Read Range Tune and Optimized</li> </ol>		
3. Large Memory Banks		
4. EAS and AFI Bits		
<ol> <li>5. 10 years Data Retention</li> <li>6. 100,000 Programming cycles</li> </ol>		
<b>7.</b> Optimized design with tail		
8. Designed for book tagging, library and document		
<ul><li>management</li><li>9. Must be compatible with Items 1- 6 of Lot 1.</li></ul>		
Training Requirement: Intensive training to		
library staff for the utilization of the system which		
includes proper techniques in book tagging,		
inventory, circulation. Operation proper maintenance		
and troubleshooting of the services and hardware.		
Warranty: Two years' warranty on parts and labor after		
user acceptance, unlimited remote technical support, quarterly maintenance service within warranty period.		
quarterry mannenance service within warranty period.		

Ve	endor Requirements:	
1.	The product or vendor must be at least an <b>ISO 29110</b> compliant with <b>SGS Certification</b> or equivalent and must submit the document as part of the bid submission.	
2.	Bidder, local or foreign should have proven expertise and have already installed in the last (3) years immediately preceding this bidding, an operational	
	Smart Digital Library that combines innovation and connectivity in Library Management like KOHA or equivalent	
3.	Bidder, local or foreign, shall submit a list of their installed <b>Smart Digital libraries</b> including contact details for verification by the end-user of the Procuring entity.	
4.	Bidder, local or foreign, must have integrated with 3rd party financial institution like PayMaya (existing RFID Card(ID Card)) or equivalent, for user / member access system. And submit list of clients.	
5.	Must adhere to All bidding requirements of the items to be bid, and failure to comply even if declared as the winning bidder, UP reserves the prior right to reject one or all of the goods to be installed, and this must be stated or included in the contract.	
6.	Brochure and product literature have to be submitted together	
7.	with the bidding documents. Includes installation, configuration and troubleshooting of integrated library system (ILS) like KOHA and ILIB in the	
8.	end-user server. Includes developing API and integration of their products offered to the integrated library system (ILS) like KOHA and ILIB in the end-user server.	
9.	Includes supply, installation, configuration, integration and troubleshooting of RFID System to the integrated library system (ILS) like KOHA and ILIB in the end- user server.	
	Bidder, local or foreign should bid both Lot 1 and Lot 2. Due to the complex nature of this project, Pre-bid and bidding conference will be face to face to be held at UP Mindanao	
	Campus or through ZOOM meeting.	
Delive	ry: Two(2) Months Delivery upon receipt of Notice to Proceed	

The terms of payment shall be as follows: upon Complete delivery of all items/services

Name of Representative	
Position	
Company	
Address	
Telephone/Fax/Email	

In compliance with Republic Act No. 9184, Section 18, and the 2016 Revised Implementing Rules And Regulations, Section 18, brand names are used because of compatibility with existing platforms Or equipment which will remain performance, functionally and useful life.