TECHNICAL SPECIFICATIONS

Item	Specification	Statement of Compliance
LOT 1	**SMART DIGITAL SECURITY GATE SYSTEM AND DIGITAL LIBRARY SELF SERVICES**	
	Item 1: One(1) Unit **UHF SECURITY GATE** **A.) Hardware and Software Specifications** • 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 class1 Gen 2 • 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 • Communication: TCP/ IP or USB • Detection Orientation: Horizontal, Vertical, Diagonal (3D Dimensional) • Detection Range: up to 3 meters • Input Power -:220 volts • UPS **B.) FEATURES** 1. Orientation: Insensitive library asset read zone 2. Multiple library assets processing capability 3. Long Range Detection: For up to 3 meters 4. 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 10. Library assets - Books, Tape, CD/DVD, Video Cassette will not be damaged during passing gate 11. Integration with CCTV Surveillance System Integration with Flap Gate	
	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
- Input Interface   : Switch Volume or 12V Level
- Gate Open while Power Off   : Yes
- Communication Interface   : RS485
- UPS   : 1000V A
- Identification Compatibility   : Omidirectional Barcode Scanner: Codaber (NW7), Code11, Code128, Code32, Code39, Code 93&93i, GS1 Standard,   (formerly EAN/UCC) Contactless Smartcard Reader: ISO 14443A, ISO15693
- Product Size   : 1400*300*1000mm (maximum)
- Material   : SUS 304 Stainless Steel
- Thickness   : Top:1.5mm+body 1.0mm
- Passage Direction : Single Directional/Bi-directional
- Sensor : 3 Pairs of Active Infrared Intrusion Detector
- Throughput Rate : 30~35p/m
- Reaction Time : 0.2S
- Driving Voltage: DC24V 6.25A
- Mechanism   : Half High Flap Gate Mechanism
- Back-up Power : Supercapacitor(12V/3A)
- Indication   : LED Direction Indication
- Acoustic Alarm : Buzzer Alarm
- LED   : Triple Color LED One Lane / two panels

FEATURES

1. Provide normally open / normally close to satisfy management request
2. Compatible with RF card readers, barcode readers
3. Equipped with infrared photocell, alarm while unauthorized entry   or tailgating attempts, together with anti-strike function to protect pedestrian
4. Lock automatically while the pedestrian not pass the lane in the pre- set time after the flap opened. The passing time is adjustable
5. Support gate open while power failure and recover N/C mode after power on
6. Reversed passing alarm function, barrier will alarm if pedestrian pass from opposite direction after reading 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, rainproof 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
- Detection Range - > 30 cm Input Power – 220 volts

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
- Barcode Scanner; Hot Swapping Battery Pistol Style
- Operation System: Android 12.0 minimum
- CPU: Quad Core Cortex - A17/1.8 GhZ
- GPU Arm Mali-T764/High Performance 3D Engine
- RAM+ROM 2G +32G
- LCD 5.0 Inches/1280×720/IPS/180deg View Angle
- Size 160mm×82mm×129mm maximum
- Weight 640g Battery Included maximum
- Read Distance > 8m or better
- Audio Large Speaker Stereo System
- Vibration Button Style 10mm Diameter
- Protocol ISO / IEC 18000-6C 6B EPC Global c1 Gen 2
- Frequency: 918-928 MHz
- UHF Antenna 3dBi.
- Peak Inventory Speed >500 Tags
- Output Power 0-33dBm
- Charge Indicator - Bicolor LED
- WiFi/ Bluetooth /4G
- USB Interface Micro USB/Molex Connection /Operating Life 10,000 Cycles
- Card Slots Nano Sim Card slot /TF Card Slot
- Power 6,000 mAh Chargeable Li-polymer Battery
- Buttons Power / Volume

FEATURES
1. Powerful Hardware Configuration to ensure applications like

Massive Data Collection, 3D Real-Time Display

2. Top class materials like CNCaluminum, PC+Abs body with 1.1 mm thickness tempered glass, excellent heat dissipation plus electromagnetic shielding features
3. Industrial grade components plus super long-life cycles
4. Ultra-long operating time
5. High End UHF RFID Engine
6. Best performance and excellent multi   tag identification ability
7. Outstanding industrial design
8. Excellent Mechanical Protection
9. Safe drop height 1.6m with IP64   protection grade
10. Book Inventory; Book Search; Book Management function use with UHF RFID System

Item 5: One(1) Unit **UHF RFID SELF CHECK KIOSK**

- Operating Frequency : UHF 920-928 MHz (Philippines) ISO 18000-6C, EPC Class1 Gen2
- RFID Tag Compatibility   : UHF 850-960 Mhz,   ISO 18000-6C, EPC Class1 Gen2
- Security Mode   : AFI, EAS
- Display : 23" LED Capacitive Touch Screen (Full HD 1920x1080 @60Hz
- Audio   : Stereo
- Camera: Front Camera Photo (Up to 5MP)
- Receipt Printer: Direct Thermal with Auto-Cutter Print resolution 203 dpi,   Print Speed up to 300 mm./sec
- Identification Compatibility   : Omidirectional Barcode Scanner: Codaber (NW7), Code11, Code128, Code32, Code 39, Code 93&93i, GS1 Standard, (formerly EAN/UCC) Contactless Smartcard Reader: ISO 14443A, ISO15693
- Detection Range : >30cm
- Communication   : TCP/IP
- UPS   : 1000 VA
- Input Power   : 220 Volts
- Compliance   : FCC/CE/EN/ESTI/

FEATURES

1. Borrow, return and renew library assets with touch interactivity
2. Multi-lingual graphical user interface
3. Orientation-insensitive library asset read zone
4. Multiple library assets processing capability
5. User authentication via advanced identification technology
6. Proof of transaction via physical and electronic receipt
7. User image capture via camera
8. Real time monitoring and report generation
9. Stand alone operation during power failure
10. Interactive tutorial and user guidance tool
11. Printer resolution at least 200 dpi and can cut paper automatically
12. All in one self-service library kiosk

Item 6: Three(3) Units **BOOK RETURN KIOSK**
• Operating Frequency : UHF 920-926 MHz (Philippines) ISO 16000-6C, EPC Class1 Gen2
 	
• RFID Tag Compatibility : UHF 660-960 MHz ISD 18000-6C, EPC Class1 Gen2
• Security Mode : AFI, EAS
• Display : 23" LED Capacitive Touch Screen (Full HD 1920x1080 @ 60Hz)
• Audio : Stereo
• Camera : Front Camera Photo (Up to 3MP) Inside Camera
 	
                     Photo (Up to 3MP)
 	
• Receipt Printer : Direct Thermal with Audio-Cutter Print resolution 203 dpi, Print Speed up to 300 mm/sec
 	
• Identification Compatibility : 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
 	
• Sensor : Auto Shutter Sensor, Smart Conveyer Sensor,
 	
                     Book, Bin Sensor
• Communication : TCP/IP
 	
• UPS : 1000 VA
 	
• Input Power : 220 Volt
• Compliance : FCC/CE/EN/ESTI/
FEATURES
• Return library assets with touch interactivity
• Multi-lingual graphical user interface
• Multiple library assets processing capability
• User authentication via advanced identification technology
• Proof of transaction via physical and electronic receipt
• User and library asset, image capture via camera
• Book bin level sensor
• Auto Shutter sensor
• Non-library asset feedback
• Real time monitoring and report generation
• Stand-alone operation during power failure
• Interactive tutorial and user guidance tool
• Smart conveyor and built in sensors
• The book return experience the newer and smart way
• Large touch screen and simple interface allow for easy touch interactivity
• System Support 24/7 days' book return
• Kiosk can be moved to desired location conveniently
• All in one Self Service library asset return kiosk	

Item 7: One(1) Unit **SMART MEETING ROOM WITH BOOKING SYSTEM (SOFTWARE AND HARDWARE)**
FRONT –END MEMBER SYSTEM
    1. System Platforms
    1.1 Can use system on PC, smartphones, and tablets
    2.   Member System
 	
    2.1 Member registration
 	
    2.2 Member information
 	
    2.3 Edit member information
 	
    2.4 Reset password
 	
    2.5 Member login
 	
    2.6 Booking list
    2.7 Booking information
 	
    3. Booking System
 	
    3.1 Can book rooms in accordance with user permission
 	
    3.2 Search available rooms for booking
 	
    3.3 Filter and sort search
 	
    3.4 Fast booking
 	
    3.5 Cancel booking prior to booking time
    3.6 Cancel booking automatically if not check-in within specified check-in   time
 	
    3.7 Extend room booking time
    3.8 Notification alerts to booker and invited users when complete booking
    3.9 Notification alerts to booker and invited users prior to booking time
    3.10 Display room information
    3.11 Display room amenities
    4. Webpage Information System
 	
    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 3rd party member authentication system
 	
    7.2 Can integrate with 3rd party system via API necessary
    7.3 Real-time data exchanges between systems and devices
FRONT-ROOM DEVICE	

1. Device Main Functions

1.1 Member

1.2 Booking

2. Information Display System

2.1 Display room availability

2.2 Display next booking

2.3 Display time up soon booking

2.4 Clear user interface design using appropriate color indications 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

6. Integration System

6.1 Integrate with 3rd party member authentication system

6.2 Can integrate with 3rd 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

1.1 Display current booking

1.2 Alert prior to end of booking time

1.3 Extend room booking time

1.4 End booking time early

1.5 Contact support

1.6 Satisfaction survey

2. System Language

2.1 Support multiple languages

3. Integration System

3.1 Integrate with 3rd party member authentication system

3.2 Can integrate with 3rd party system via API as necessary

3.3 Real-time data exchanges between systems and
   devices

BACK-END STAFF SYSTEM

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

   3.2 Add, edit, and delete rooms

   3.3 Add, edit, and delete room details such as room description, 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

   5.1 Survey report dashboard

   5.2 Add, edit, and delete survey questionnaires

   5.3 Export survey report in word, excel, and PDF

6. Banner Slide System

   6.1 Add, edit, and delete banner slides

   6.2 Set time to show or hide banner slides

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

   9.1 Support multiple languages

10. Integration System

    10.1 Integrate with 3rd party member authentication system

    10.2 Can integrate with 3rd party system via API as necessary

    10.3 Real-time data exchanges between systems and devices

11. Access Log System

    11.1 System usage log

    11.2 Room booking log

    11.3 Reporting log

    11.4 Exporting in word, excel, and PDF

HARDWARE

1 Unit LCD INTERACTIVE WHITEBOARD

-At least 49" min; HD resolution remote session interactive teaching wireless transmission screen, multi touch

-At least Smart rotation split screen, video conference, 10 point touch

-At least Windows and android, MAC OS

-At least 4GB RAM, 32 GB ROM, 4K resolution preferred

-At least with moving bracket

1 Unit ANDROID TABLET WITH LIGHT BAR

-At least 10" with touch screen

-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 resolution1280x800 minimum)

-At least Network Wifi Ethernet, Bluetooth

- 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:
 1. Operating Frequency: UHF 918-928 MHz, ISO 18000- 6C, EPC Class1 Gen2
 2. Operating Mode : Passive
 3. Functionality : Read/Write
 4. Memory : EPC 256 Bits, User Memory 512 Bits, Unique TID 96 Bits, Kill Password 32 Bits
 5. RFID Tag Compatibility: UHF 860-960 MHz, ISO 18000-6C, EPC Class1 Gen2
 6. Security Mode : AFI Bits, EAS Bits
 7. Data Retention : 10 years minimum
 8. Programming Cycles : 100,000 Cycles
 9. Label Size : 160x8mm maximum
 10. Antenna Size : 157x3.5mm
 11. Release Liner Size : 178x8mm
 12. Inlay Substrate : Special PET
 13. Antenna Material : Silver
 14. Conductive Ink : Double Sided Adhesive
 15. Operating Temperature: -40^C to $+70^C$, Storage Temperature -25^C to 50^C
 FEATURES
 1. 918-928 MHz Frequency Optimized
 2. Read Range Tune and Optimized
 3. Large Memory Banks
 4. EAS and AFI Bits
 5. 10 years Data Retention
 6. 100,000 Programming cycles
 7. Optimized design with tail
 8. Designed for book tagging, library and document management
 9. Must be compatible with Items 1- 6 of Lot 1. | |

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.

Vendor Requirements:

1. The product or vendor must be at least an **ISO 29110** compliant with **SGS Certification** 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 **Smart Digital libraries** 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 with the bidding documents.
7. Includes installation, configuration and troubleshooting of integrated library system (ILS) like KOHA and ILIB in the end-user server.
8. 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.
10. Bidder, local or foreign should bid both Lot 1 and Lot 2.
11. 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.

Delivery: Two(2) Months Delivery upon receipt of Notice to Proceed