

# MEPNN Supplier Scouting Opportunity Synopsis

## Section 1: General Information

Scouting Number	2026-176
Item to be Scouted	BABA: Credential Reader
Days to be scouted	14
Response Due By	05/13/2026
Description	A door credential reader is the device mounted at an entry point—like a door, gate, or turnstile—that authenticates a person's identity before unlocking the access control hardware (electric strike, maglock, etc.). It's the "front end" of an

## Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	A door credential reader is built through a multi-stage electronics manufacturing process that combines PCB fabrication, RFID/BLE/NFC module integration, firmware loading, enclosure assembly, and final functional testing.
Provide dimensions / size / tolerances / performance specifications for the item	This is for a 48-unit Multifamily Apartment. We are looking for typical equipment for this type of application. Project will be a MHFA project. Please refer to section 2.20 Wireless Access Control Locks, 2.21 Finishes and Base Materials, and HW Sets on the attached document for additional information.

List required materials needed to make the product, including materials of product components

1. Electronic Components (Core Hardware)  
These form the functional heart of the reader.
  - Microcontroller (MCU) — ARM Cortex-M series or similar
  - RFID/NFC/BLE module depending on reader type
    - 125 kHz prox coil
    - 13.56 MHz smart-card antenna
    - Bluetooth Low Energy module
    - NFC transceiver
  - Antenna coil(s) — copper wound or PCB-etched
  - Power regulation components
    - Voltage regulators
    - DC-DC converters
    - Capacitors and inductors
  - Memory chips
    - Flash memory for firmware
    - EEPROM for configuration
  - Communication interface components
    - Wiegand drivers
    - RS-485 transceiver (for OSDP)
    - Ethernet/PoE module (for IP readers)
  - LED indicators — RGB or bi-color
  - Buzzer / piezo speaker
  - Tamper switch — mechanical or magnetic
  - Connectors
    - Terminal blocks
    - Ribbon connectors
    - Wire harnesses
  - Security components
    - Secure element chip (for encrypted credential handling)
    - Hardware random-number generator (in advanced models)
2. Printed Circuit Board (PCB)
  - FR-4 substrate (standard)
  - Multi-layer PCB (typically 2–6 layers)
  - Surface-mount pads for ICs
  - RF-tuned traces for antenna performance
  - Conformal coating (optional for outdoor models)
3. Mechanical Components (Enclosure & Mounting)
  - Housing materials
    - ABS plastic
    - Polycarbonate
    - UV-stabilized plastics (for outdoor use)
    - Die-cast aluminum (vandal-resistant models)
  - Mounting plate — steel or aluminum
  - Gaskets / seals — silicone or EPDM for IP65/IP67 weatherproofing
  - Screws and fasteners — stainless steel
  - Tamper-resistant screw set
  - Lens covers for LEDs or biometric sensors
5. Firmware & Software Materials  
(Not physical, but essential to the product.)
  - Bootloader firmware
  - RFID/BLE/NFC protocol stack
  - OSDP or Wiegand communication firmware
  - Encryption libraries (AES, DESFire EV2, etc.)
  - Configuration software for installers
  - Secure key-management system
6. Power & Electrical Materials
  - 12V or 24V DC input circuitry
  - Reverse-polarity protection
  - Transient voltage suppressors (TVS diodes)
  - Surge protection components
  - PoE circuitry (for IP readers)

Are there applicable certification requirements?	No
Are there applicable regulations?	No
Are there any other standards, requirements, etc.?	No
Additional Technical Comments	This is for a three-story 48 Unit Multifamily Apartment over a one-story parking garage. MHFA Project.

## Section 4: Business Information

Estimated potential business volume	Estimated 60 Units
Estimated target price / unit cost information (if unavailable explain)	Estimated \$4,000.00
When is it needed by?	July 2027
Describe packaging requirements	Protects sensitive electronics (ESD, moisture, impact) Organizes hardware and wiring for installers Meets regulatory labeling requirements Survives shipping, stacking, and palletization Provides a professional, consistent unboxing experience
Where will this item be shipped?	Blaine Minnesota

## Additional Comments

Is there other information you would like to include?	
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