MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2026-654
Item to be Scouted	BABA: Electronic Access Control and Door Security Systems
Days to be scouted	14
Response Due By	12/02/2026
Description	Electronic access control and door security equipment designed to regulate, monitor, and manage entry into residential and commercial buildings. These systems incorporate electronic locking mechanisms, credential readers, access

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
	access may be granted through proximity cards, key fobs, PIN codes, mobile credentials, or integrated building management systems. Products may include electronic door locks, electrified mortise locks, magnetic locks, card readers, keypads, access control panels, door position sensors, and request-to-exit devices. These systems are commonly installed in multifamily residential developments, commercial buildings, healthcare facilities, and institutional properties to improve building security and manage authorized access.
State item to be used in	Minnesota

Describe the manufacturing processes (elaborate to provide as much detail as possible)	1. Raw Material Processing Raw materials are sourced and prepared for manufacturing, including stainless steel, brass, aluminum, zinc alloys, copper, engineered thermoplastics, electronic-grade materials, and semiconductor components. These materials are used to manufacture locking mechanisms, exterior housings, mounting hardware, electronic circuit boards, credential readers, and internal electrical components. 2. Metal Fabrication and Locking Mechanism Manufacturing Metal components are manufactured through stamping, die casting, CNC machining, drilling, milling, and metal forming processes. These operations produce lock bodies, deadbolts, latch assemblies, internal gears, mounting plates, strike plates, and other mechanical locking components. Metal surfaces may undergo polishing, plating, anodizing, or protective coating treatments to improve corrosion resistance, durability, and appearance. 3. Plastic Housing and Component Manufacturing Plastic components, including electronic reader housings, keypad enclosures, protective covers, and internal mounting components, are manufactured through injection molding. Engineered thermoplastics are heated and injected into precision molds, cooled, and removed for finishing. Components are inspected for dimensional accuracy, structural integrity, and proper fit. 4. Electronic Circuit Board Manufacturing Printed circuit boards (PCBs) are fabricated using copper-clad substrates and conductive circuit patterns. Electronic components, including microprocessors, resistors, capacitors, memory chips, communication modules, and power management components, are installed using automated surface-mount technology (SMT), soldering, and precision assembly processes. 5. Reader and Authentication Component Assembly Credential readers, keypad interfaces, proximity sensors, radio-frequency identification (RFID) components, and wireless communication modules are assembled and integrated into the electronic access control equipment. Depending on the system configuration, products may incorporate technologies such as RFID, NFC, Bluetooth, Wi-Fi, or mobile credential authentication. 6. Electronic and Mechanical Integration Electronic components are integrated with the mechanical locking assembly to create a complete access control device. Electric motors, solenoids, actuators, sensors, wiring harnesses, batteries, and mechanical locking components are assembled and connected to provide controlled locking and unlocking functions. Additional components may include door position sensors, request-to-exit devices, and emergency release mechanisms. 7. Software Programming and Configuration Firmware and operating software are installed onto electronic control boards and access control devices. Products are programmed to recognize authorized credentials, manage access permissions, communicate with centralized access control systems, and record applicable entry events. Wireless products are configured and tested for communication with compatible building security networks and management platforms. 8. Final Assembly and Finishing Completed electronic assemblies, locking mechanisms, exterior housings, handles, mounting plates, and electrical components are integrated into the finished product. Surface finishes, protective coatings, product labels, and manufacturer identification markings are applied. Products are inspected for appearance, assembly quality, and dimensional accuracy. 9. Quality Control and Performance Testing Finished products undergo a series of inspections and performance tests, which may include: - Mechanical locking and unlocking cycle testing. - Electronic credential recognition and authentication testing. - Electrical continuity and power consumption testing. - Battery performance and backup power testing. - Wireless communication and connectivity testing. - Environmental and temperature resistance testing. - Corrosion resistance and surface finish inspections. - Tamper resistance and physical security testing. - Software functionality and access authorization verification. - Integration testing with compatible access control systems.

Provide dimensions / size / tolerances / performance specifications for the item	1. Dimensions and Physical Characteristics Typical dimensions and construction characteristics include: Component Typical Dimensions / Characteristics Electronic door lock Approximately 6–12 inches tall, 2–4 inches wide Electronic mortise lock Designed for standard commercial door preparations Electronic card reader Approximately 3–6 inches tall, 2–3 inches wide Keypad access reader Approximately 4–7 inches tall, 2–4 inches wide Access control panel Varies based on number of controlled doors and system capacity Door position sensor Compact surface-mounted or recessed configuration Electric strike Designed to fit compatible door frames and latch assemblies Magnetic lock Commonly available in 600–1,200 lb holding-force configurations Lock housing Stainless steel, brass, zinc alloy, or aluminum Reader housing Metal or impact-resistant engineered thermoplastic 2. Electrical and Operating Specifications Specification Typical Requirements Operating Voltage 12V DC or 24V DC, depending on equipment Power Supply Hardwired low-voltage power or battery-operated Communication Ethernet, Wi-Fi, Bluetooth, RFID, NFC, or RS-485, depending on configuration Credential Technology Proximity cards, smart cards, key fobs, PIN codes, or mobile credentials Operating Temperature Typically -4°F to 140°F, depending on product Power Consumption Varies by lock, reader, and operating configuration Backup Power Battery backup or emergency power supply where required Access Control Capacity Depends on controller, software, and system configuration Locking Mechanism Motor-driven, solenoid-operated, electric strike, or electromagnetic 3. Material and Construction Requirements Products may incorporate the following materials: - Stainless steel and brass for locking mechanisms and exposed hardware. - Zinc alloys and aluminum for structural housings and mounting assemblies. - Engineered thermoplastics for reader enclosures and protective covers. - Copper wiring and electronic-grade circuit board materials. - Semiconductor components for credential authentication and electronic processing. - Hardened steel components for deadbolts, latch assemblies, and internal locking mechanisms. - Rubber gaskets and protective seals for environmental resistance. 4. Manufacturing Tolerances Manufacturing tolerances depend on the specific product and manufacturer engineering drawings. Typical requirements include: - Precision machining of locking mechanisms to maintain proper alignment and operation. - Consistent dimensional tolerances for mounting plates, lock bodies, and door preparation openings. - Proper alignment of electronic readers and credential sensing components. - Electrical connections must maintain appropriate conductivity and secure attachment. - Mechanical locking components must operate without binding or excessive friction. - Enclosures must maintain appropriate fit, structural integrity, and environmental protection. - Electronic components must meet specified operating voltage, signal, and communication requirements. 5. Performance and Functional Requirements The finished equipment should meet the following performance expectations: - Reliable electronic credential recognition and authentication. - Consistent locking and unlocking operation. - Compatibility with designated door hardware and access control systems. - Resistance to normal wear from repeated daily use. - Secure communication between readers, controllers, and electronic locking

	devices. - Appropriate protection against unauthorized access and tampering. - Reliable operation during specified environmental and temperature conditions. - Integration with building security, monitoring, and management systems. 6. Applicable Performance Testing Depending on the equipment configuration, testing may include: - Mechanical endurance and operational cycle testing. - Electrical safety and insulation testing. - Credential recognition and communication testing. - Door locking and unlocking performance testing. - Corrosion resistance testing. - Environmental exposure and temperature testing. - Physical strength and forced-entry resistance testing. - Battery life and backup power testing. - Network connectivity and software functionality testing.
List required materials needed to make the product, including materials of product components	Raw Material Processing Raw materials are sourced and prepared for manufacturing, including stainless steel, brass, aluminum, zinc alloys, copper, engineered thermoplastics, electronic-grade materials, and semiconductor components. These materials are used to manufacture locking mechanisms, exterior housings, mounting hardware, electronic circuit boards, credential readers, and internal electrical components.
Are there applicable certification requirements?	Yes
Certification(s) required	UL
Are there applicable regulations?	Yes
Details	Standard / Certification Description / Requirement UL 294 Standard for Access Control System Units. Covers access control equipment, including readers, controllers, and related components. UL 1034 Standard for Burglary-Resistant Electric Locking Mechanisms. Applies to qualifying electrically operated locking devices. UL 10C Standard for Positive Pressure Fire Tests of Door Assemblies. Relevant to fire-rated door assemblies and compatible hardware. UL 305 Standard for Panic Hardware. Applies to qualifying panic and exit hardware. UL 294B Covers access control system units incorporating certain power-over-ethernet technologies, where applicable. FCC Part 15 Establishes electromagnetic interference and radio-frequency requirements for electronic and wireless access control devices. ANSI/BHMA A156 Series Establishes performance and testing requirements for commercial door hardware, including locks, strikes, closers, and related components. NFPA 70 (NEC) Establishes electrical installation and wiring requirements for access control equipment. NFPA 101 Establishes life safety and means-of-egress requirements affecting electronic locking and access control systems. NFPA 80 Establishes requirements for fire doors and other opening protectives, including compatible locking hardware.
Are there any other stndards, requirements, etc.?	Yes

Details	UL Listing: Electrical access control equipment must be evaluated and listed where required by the applicable building and electrical codes. NRTL Certification: Applicable electrical products may require testing and certification by an OSHA-recognized Nationally Recognized Testing Laboratory. FCC Authorization: Wireless access control products must meet applicable FCC equipment authorization requirements. Bluetooth Qualification: Products incorporating Bluetooth technology may require applicable Bluetooth SIG qualification. Wi-Fi Certification: Products marketed as Wi-Fi certified must meet applicable Wi-Fi Alliance certification requirements. RoHS Compliance: Certain products may be required to meet hazardous substance restrictions based on the applicable market and procurement requirements. Fire Door Compatibility: Electronic locks and access hardware installed on fire-rated doors must maintain the required fire door assembly listing and labeling.
Additional Technical Comments	

Section 4: Business Information

Estimated potential business volume	Door security and access control hardware for a 92-unit multifamily project that includes private indoor and outdoor community space.
Estimated target price / unit cost information (if unavailable explain)	Pricing cannot be provided at this time due to the ongoing design finalization process. Additionally, costs vary significantly between suppliers, and there is currently uncertainty regarding potential price increases associated with BABA-compliant versus non-BABA-compliant products. Shipping expenses and labor costs may also vary depending on product availability, supplier location, and installation requirements. As a result, providing an accurate cost estimate at this stage would be premature.
When is it needed by?	Immediate
Describe packaging requirements	Palletized in boxes
Where will this item be shipped?	Minneapolis, MN

Additional Comments

Is there other information you would like to include?	Funding: MHFA; Minnesota Housing Finance Agency POC: Nick Hoelscher; Nick.h@noorcompanies.com