**SUPREMA ACCESS CONTROL DEVICE - BioEntry P2**

**TECHNICAL SPECIFICATIONS**

2023-12-04

# PART 1 - GENERAL

The intent of this document is to specify the minimum criteria for the design, supply, installation, and commissioning of the BioEntry P2.

* 1. SUMMARY

1. Section includes a biometric reader and door controller with Ethernet network connectivity.
2. Product - An IP enabled biometric reader and door controller, capable of scanning and registering fingerprints and RFID cards, managing users and controlling access.
   1. REFERENCE
3. Standards
4. IEEE 802.3 Ethernet Standards
5. FCC - Code of Federal Regulations, Part 15, Class A
6. Conformity for Europe (CE) - R&TTE Directive 1999/5/EC
7. UK Conformity Assessed (UKCA)
8. Korea Certification (KC)
9. Regulatory Compliance Mark (RCM)
10. Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) - (EC No. 1907/2006)
11. The Waste Electrical and Electronic Equipment (WEEE) - Directive 2012/19/EU
    1. SUBMITTALS
    2. QUALIFICATIONS
12. Manufacturer shall be ISO 9001 certified with a minimum of five years’ experience in producing access control equipment.
13. Installers shall be trained by the Manufacturer to install, configure, and commission the access control system.
    1. WARRANTY
14. Manufacturer shall provide a limited ( ) month warranty for the product to be free of defect in material and workmanship.

END OF SECTION

# PART 2 - PRODUCTS

1. EQUIPMENT
2. Manufacturer   
   Suprema Inc.   
   17F Parkview Office Tower, 248, Jeongjail-ro, Seongnam-si, Gyeonggi-do, 13554, Republic of Korea  
   Tel: 82-31-783-4502, Fax: 82-31-783-4503, [https://www.supremainc.com](https://www.supremainc.com/)  
   [https://support.supremainc.com](https://support.supremainc.com/)
3. Model(s) name: BioEntry P2

Part Number: BEP2

1. Alternates: NONE
2. DESCRIPTION
3. The biometric reader and door controller (“reader/controller”) shall be an IP-enabled device capable of scanning fingerprints and RFID cards, managing users and controlling access.
4. FEATURES
5. Access control and time attendance device
6. Multi-class RFID card reading, HID multiCLASS support
7. Mobile card reading with NFC technology
8. Mullion type form-factor
9. NIST MINEX certified and compliant
10. OSDP V2 Compliant
11. TCP/IP, RS-485, Wiegand, TTL, Relay, Tamper
12. Built-in card reader with card options (125kHz EM, HID Prox & 13.56 MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, iCLASS SE/SR/Seos, NFC)
13. SPECIFICATIONS

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| --- | --- | --- |
| **Category** | **Feature** | **Specification** |
| Credential | Biometric | Fingerprint |
| RF Option | **BEP2-OD**: 125KHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3**1)**, FeliCa |
| **BEP2-OA**: 125KHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3**1)**, FeliCa, iCLASS SE/SR/Seos |
| RF Read Range**2)** | MIFARE/DESFire/iCLASS: 50 mm, EM/HID Prox/FeliCa: 30 mm |
| Mobile | NFC |
| General | CPU | 1.0 GHz |
| Memory | 8 GB Flash + 64 MB RAM |
| Crypto Chip | Supported |
| LED | Multi-color |
| Sound | Multi-tone Buzzer |
| Operating Temperature | -20 °C ~ 50 °C |
| Storage Temperature | -40 °C ~ 70 °C |
| Operating Humidity | 0 % ~ 80 %, non-condensing |
| Storage Humidity | 0 % ~ 90 %, non-condensing |
| Dimension (W x H x D) | 50.1 x 164 x 38 (mm) |
| Weight | * Device: 162 g * Bracket (Including washer and bolt): 39 g |
| Certificates | CE, UKCA, KC, FCC, RCM, BIS, ANATEL, RoHS, REACH, WEEE |
| Fingerprint | Image Dimension | 272 x 320 pixels |
| Image Bit Depth | 8 bit, 256 grayscale |
| Resolution | 500 dpi |
| Template | SUPREMA / ISO 19794-2 / ANSI 378 |
| Extractor | MINEX certified and compliant |
| Live Fingerprint Detection | Supported (SW-based) |
| Capacity | Max. User | 10,000 |
| Max. Credential (1:N) | Fingerprint: 10,000 |
| Max. Credential (1:1) | * Fingerprint: 10,000 * Card: 10,000 |
| Max. Text Log | 1,000,000 |
| Interface | Ethernet | Supported (10/100 Mbps, auto MDI/MDI-X) |
| RS-485 | 1 ch Master / Slave (Selectable) |
| RS-485 Communication Protocol | OSDP V2 compliant |
| Wiegand | 1 ch Input / Output (Selectable) |
| TTL Input | 2 ch Inputs |
| Relay | 1 Relay |
| Tamper | Supported |
| Electrical | Power | * Voltage: 12 Vdc * Current: Max. 0.2 A |
| Switch Input VIH | * Min.: 3 V * Max.: 5 V |
| Switch Input VIL | Max.: 1 V |
| Switch Pull-up Resistance | 4.7 kΩ (The input ports are pulled up with 4.7 kΩ.) |
| Wiegand Output VOH | More than 4.8 V |
| Wiegand Output VOL | Less than 0.2 V |
| Wiegand Output Pull-up Resistance | Internally pulled up with 1 kΩ |
| Relay | 1 A @ 30 VDC Resistive load |
| Platform | BioStar 2 | Supported |

1) DESFire EV2/EV3 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with BioEntry P2.

2) RF read range will vary depending on installation environment.

END OF SECTION

# PART 3 - EXECUTION

1. INSTALLER
2. Contractor personnel shall comply with all applicable state and local licensing requirements.
3. PREPARATION
4. Contractor shall avoid locating the reader/controller in a location subject to direct sunlight, dust or soot.
5. IP addressing shall be coordinated with the Owner’s responsible IT personnel.
6. STORAGE
7. The device shall be stored in an environment where temperature is in the range of -40°C - +70°C.
8. The device shall be stored in an environment where humidity is in the range of 0% - 90%, non-condensing.
9. INSTALLATION
10. The device shall be installed in an environment where temperature is in the range of -20°C - 50°C.
11. The device shall be installed in an environment where humidity is in the range of 0% - 80%, non-condensing.
12. All wires shall be run through conduit to prevent failure caused by rodent damage.
13. Connections between card readers and a door controller shall not exceed 100 meters.
14. All peripheral devices shall be grounded.
15. To avoid RF interference, a minimum separation distance must be maintained.

|  |  |
| --- | --- |
| Wall thickness | Distance |
| 100 mm | 270 mm |
| 120 mm | 250 mm |
| 150 mm | 170 mm |

1. EXAMINATION
2. All network connections to the reader/controller shall be tested for proper levels of performance.

END OF SECTION