**SUPREMA ACCESS CONTROL DEVICE - BioEntry R2**

**TECHNICAL SPECIFICATIONS**

2024-01-30

# PART 1 - GENERAL

The intent of this document is to specify the minimum criteria for the design, supply, installation, and commissioning of the BioEntry R2.

* 1. SUMMARY

1. Section includes a biometric reader with RS-485(OSDP).
2. Product - An OSDP enabled biometric reader, capable of scanning and registering fingerprints and RFID cards.
   1. REFERENCE
3. Standards
4. FCC - Code of Federal Regulations, Title 47, Part 15, Class B
5. Conformity for Europe (CE)
6. UK Conformity Assessed (UKCA)
7. Korea Certification (KC)
8. Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) - (EC No. 1907/2006)
9. The Waste Electrical and Electronic Equipment (WEEE) - Directive 2012/19/EU
   1. SUBMITTALS
   2. QUALIFICATIONS
10. Manufacturer shall be ISO 9001 certified with a minimum of five years’ experience in producing access control equipment.
11. Installers shall be trained by the Manufacturer to install, configure, and commission the access control system.
    1. WARRANTY
12. 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 R2

Part Number: BER2

1. Alternates: NONE
2. DESCRIPTION
3. The biometric reader shall be a RS-485(OSDP) enabled device capable of scanning fingerprints and RFID cards.
4. The biometric reader can be configured the two type of access control system which is the distributed system and the centralized system.
5. FEATURES
6. Dedicated fingerprint and RFID card reader
7. Multi-class RFID card reading
8. Mobile card reading with NFC technology
9. Mullion type form-factor
10. NIST MINEX certified and compliant
11. OSDP V2 Compliant
12. Built-in card reader with card options (125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3, FeliCa, NFC)
13. SPECIFICATIONS

|  |  |  |
| --- | --- | --- |
| **Category** | **Feature** | **Specification** |
| Credential | Biometric | Fingerprint |
| RF Option | 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, DESFire EV1/EV2/EV3**1)**, FeliCa |
| RF Read Range**2)** | MIFARE/DESFire: 50 mm, EM/Felica: 30 mm |
| Mobile | NFC |
| General | CPU | 1.0 GHz |
| Memory | 32 MB Flash + 32 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: 158 g * Bracket (Including washer and bolt): 39 g |
| Certificates | CE, UKCA, KC, FCC, 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 |
| Interface | RS-485 | 1 ch Slave |
| RS-485 Communication Protocol | OSDP V2 compliant |
| Tamper | Supported |
| Electrical | Power | * Voltage: 12 Vdc * Current: Max. 0.2 A |
| 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 R2.

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 in a location subject to direct sunlight, dust or soot.
5. STORAGE
6. The device shall be stored in an environment where temperature is in the range of -40 °C ~ 70 °C.
7. The device shall be stored in an environment where humidity is in the range of 0 % ~ 90 %, non-condensing.
8. INSTALLATION
9. The device shall be installed in an environment where temperature is in the range of -20 °C ~ 50 °C.
10. The device shall be installed in an environment where humidity is in the range of 0 % ~ 80 %, non-condensing.
11. All wires shall be run through conduit to prevent failure caused by rodent damage.
12. Connections between card readers and a door controller shall not exceed 100 meters.
13. All peripheral devices shall be grounded.
14. To avoid RF interference, a minimum separation distance must be maintained.

|  |  |
| --- | --- |
| Wall thickness | Distance |
| 100 mm | 250 mm |
| 120 mm | 250 mm |
| 150 mm | 180 mm |

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

END OF SECTION