**SUPREMA TIME AND ATTENDANCE / WORKFORCE MANAGEMENT**

**MULTIMEDIA WORKSTATION - NOVUS**

**TECHNICAL SPECIFICATIONS**

2019-11-07

# PART 1 - GENERAL

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

* 1. SUMMARY

1. Section includes a time attendance and workforce management workstation with the Android open platform.
2. Product - A multimedia workstation, capable of integrating with the time attendance and workforce management applications.
   1. REFERENCE
3. Standards
4. IEEE 802.3 Ethernet Standards
5. FCC - Code of Federal Regulations, Title 47, Part 15, Class A
6. Conformity for Europe (CE) – Radio Equipment Directive (RED) 2014/53/EU
7. Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) - (EC No. 1907/2006)
8. The Waste Electrical and Electronic Equipment (WEEE) - Directive 2012/19/EU
   1. SUBMITTALS
   2. QUALIFICATIONS
9. Manufacturer shall be ISO 9001 certified with a minimum of five years’ experience in producing access control equipment.
10. Installers shall be trained by the Manufacturer to install, configure and commission the access control system.
    1. WARRANTY
11. 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, Jeongja, Bundang, Seongnam, Gyeonggi, 463-863, Republic of Korea  
   Tel: 82-31-783-4502, Fax: 82-31-783-4503, [www.supremainc.com](http://www.supremainc.com)  
   <http://support.supremainc.com>
3. Model(s): NOVUS
4. Alternates: NONE
5. DESCRIPTION
6. The multimedia workstation shall be a device available to use a variety of options capable of integrating with the time attendance and workforce management applications.
7. FEATURES
8. Time Attendance and Workforce Management multimedia workstation based on Android 8.0 Oreo
9. Open platform SVP Android SDK for easy integration of a customized user interface
10. Quad Core 1.0 GHz with 1GB, 2GB or 4GB RAM (Optional)
11. Large 7” display with capacitive touch screen
12. Multi-class RFID card reading (Optional)
13. NIST MINEX certified and compliant
14. CMOS 1M pixels camera
15. Variety of options such as fingerprint sensor, RFID module, MSR, Wi-Fi, GPS, 4G cellular modem, and backup batteries
16. RS-232, Wiegand Input, Relay, USB, SD Card, PoE
17. SPECIFICATIONS
    1. Basic Device

|  |  |  |
| --- | --- | --- |
| **Category** | **Feature** | **Specification** |
| General | CPU | 1.0 GHz Quad Core |
| RAM | 1GB, 2GB, 4GB(Optional) DDR3 SDRAM |
| Flash Memory | 16GB eMMC |
| LCD type | 7.0’’ LCD Touch Display |
| LCD resolution | 1024 x 600 pixels |
| LED | Multiple colors |
| Sound | Max 1W Loudspeaker |
| Operating temperature | 0°C ~ 50°C |
| Storage temperature | -20°C ~ 70°C |
| Operating humidity | 0% ~ 80%, non-condensing |
| Storage humidity | 0% ~ 90%, non-condensing |
| Camera type | CMOS 1M pixels |
| Camera resolution | 1280 x 720 pixels |
| Camera angle | Diagonal 122°, Horizontal 64.7°, Vertical 103.3° |
| Dimension (W x H x D) | 210 mm x 250 mm x 96 mm |
| Weight | NVS07-D1: 1,189 g |
| NVS07-D1K: 1,235 g |
| Certificates | CE, FCC, RoHS, REACH, WEEE |
| Capacity | Max. User (1:1) | 50,000 |
| Max. User (1:N) | 20,000 |
| Max. Template (1:1) | 100,000 *\* Two templates per finger* |
| Max. Template (1:N) | 40,000 *\* Two templates per finger* |
| Interface | Wi-Fi | Supported (IEEE 802.11 b/g/n/ac) (Optional) |
| Ethernet | Supported (10/100 Mbps, auto MDI/MDI-X) |
| RS-485 | Not supported |
| RS-232 | Supported (RXD, TXD, CTS, RTS) |
| Wiegand | 1ch Input |
| TTL input | Not supported |
| Relay | 2 Relays |
| USB | USB 2.0 (Host) |
| SD Card | microSD card (Supports up to 32GB) |
| PoE+ | Supported (IEEE 802.3at compliant) |
| Tamper | Not supported |
| Intercom | Not supported |
| Electrical | Power | Voltage: DC 12 V  Current: Max.2140 mA (Based on full option) |
| Wiegand input VIH | Max. 5V  Min. 3V |
| Wiegand input VIL | Max. 1V |
| Wiegand input Pull-up resistor | 4.7kΩ (The input ports are pulled up with 4.7kΩ.) |
| Relay | Voltage: Max. 100 VDC / 250 VAC  Current: Max. 5 A (DC) / 6 A (AC) |

* 1. Optional Parts

|  |  |  |
| --- | --- | --- |
| **Category** | **Item** | **Specification** |
| Fingerprint | Sensor | Optical sensor (OP6) |
| Image dimension | 272 x 320 pixels |
| Image bit depth | 8bit, 256 grayscale |
| Resolution | 500 dpi |
| Template | SUPREMA / ISO 19794-2 / ANSI 378 |
| Extractor / Matcher | MINEX certified and compliant |
| LFD | Not supported |
| RFID | Option | R1: 125kHz EM, & 13.56MHz MIFARE, MIFARE Plus, DESFire/EV1, FeliCa, HID iCLASS SE/SR/Seos (UID Only), Legic Advant (UID Only) |
| R2: 125kHz EM, HID Prox & 13.56MHz MIFARE, MIFARE Plus, DESFire/EV1, FeliCa, HID iCLASS SE/SR/Seos, Legic Advant (UID Only) |
| R3 : 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire/EV1, Legic Advant/Prime (Planned) |
| MSR | Track | 3 Tracks |
| Cellular Modem | Model Name | Sierra – GL7500 |
| Target Region | Americas |
| 4G LTE | Category: Cat-4 |
| Frequency Bands: B2, B4, B5, B13, B17 |
| 3G | Technology supported: HSPA+ |
| Frequency Bands: B2, B5 |
| Interface | UART: 1RS 232 (up to 921 kbps) |
| USB: 1 |
| SIM Interface 1.8V/3V: 1 |
| Flash LED Output: Network |
| Dimensions | 67 x 51.5 x 23.5 mm |
| GPS | Model Name | SC872-A |
| Frequency Bands | GPS L1,GLONASS L1, QZSS L1, Galileo E1 |
| Standards | NMEA |
| Interfaces | UART |
| Dimensions (W x H x D) | 22 x 21 x 8.5 mm |
| Weight | 9.2 g |
| Sensitivity | Acquisition: -148 dBm |
| Navigation: -163 dBm |
| Tracking: -165 dBm |
| Positional accuracy  (CEP50) | Autonomous Positional Error ‹ 3 m |
| Accuracy | Speed: ‹ 0.01 m/s |
| Heading: ‹ 0.01 deg |
| Time to first fix  (90% @ -130 dBm) | Hot start: 1 s |
| Cold start: ‹ 35 s |
| Wi-Fi | Model Name | EW-7822ULC |
| Standard | 2.4GHz: IEEE 802.11b, 802.11g, 802.11n |
| 5GHz: IEEE 802.11ac, 802.11a, 802.11n |
| Interface | 1 x USB 2.0 Type A |
| 1 x Link/Activity LED |
| Antenna | Internal Antennas x 2 (2T2R) |
| Dimensions  (W x H x D) | 14.9 x 7.1 x 20 mm |
| Weight | 2 g |
| Operating Range | 11a: 6/9/12/24/36/48/54Mbps |
| 11b: 1/2/5.5/11Mbps; 11g: 6/9/12/24/36/48/54Mbps |
| 11n (20MHz): MCS0-07, up to 144Mbps |
| 11n (40MHz): MCS0-07, up to 300Mbps |
| 11ac (80MHz): VHTMCS0-9, up to 867Mbps |
| Security | WEP 64/128-bit, WPA, WPA2 |
| Software WPS Configuration |
| Battery | Power | Voltage: 7.4 V (Max. 8.4 V) |
| Capacity: 3,400 mAh |

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 device 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 -20°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 0°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. All peripheral devices shall be grounded.
14. Keep at least 10 cm distance between the devices when install multiple devices.
15. EXAMINATION
16. All network connections to the device shall be tested for proper levels of performance.

END OF SECTION