NAYAX UNO-Mini Card Reader User Guide

Contents

Nayax

NAYAX UNO-Mini Card Reader

Specifications

- **Model**: UNO-mini
- **Version**: 1.2

Product Information

Introduction

- The UNO-mini is an ultra-compact, certified payment NFC Reader based on Nayax field-proven technology. It is specifically designed for unattended payment and mass transit applications.
- Its compact design enables easy integration and installation in unattended self-service payment stations, such as EV Chargers, ATMs, AVMs, TVMs, gaming and gambling machines, kiosks, access control gates, and more.
- UNO-mini's plug-and-play design makes it easy to connect to any existing infrastructure and POS terminal, quickly upgrading it to contactless operations without disrupting ongoing business operations.

Supported Payment Applications & Technologies
Details about supported payment applications and technologies are not provided in the extracted text. Please refer to the complete user manual for this information.

Product Usage Instructions

- **Technical Specifications**
  Dimensions: The dimensions of the UNO-mini are detailed in the product manual. Please refer to the manual for specific measurements.
- **Connector and Cable: Connector**
  The connector information is available in the manual. Ensure proper connection according to the guidelines provided.
- **Interface Cable**

Use the interface cable provided with the UNO-mini for connecting to the relevant infrastructure. Follow the manual instructions for a secure connection.

- **Product Images**
  Refer to the product manual for detailed images of the UNO-mini for visual reference during installation.

Notice

- This manual contains intellectual property including, but not limited to, trade secrets and know-how, operation procedures, and production procedures that belong solely to Nayax.
- Disclosure, use, and/or production of any part of the above are strictly forbidden, except under a written license from Nayax.

Introduction

The UNO-mini is an ultra-compact, certified payment NFC Reader based on onNayax field-proven technology specifically. Its compact design enables easy integration and installation in unattended self-service payment stations, such as EV Chargers, ATMs, AVMs, TVMs, gaming and gambling machines, kiosks, access control gates, and more. UNO-mini's plug-and-play design makes it easy to connectto any existing infrastructure design making it seminal, quickly upgrading to contactless operations without disrupting ongoing business operations.

Figure1-1:UNO-mini

Supported Payment Applications & Technologies

- ContactEMV®

- EMV® Modular ArchitectureLabel
- ContactlessEMV®L1
- **ContactlessEMV®L2:**
  - KernelC-2(MasterCard)

  - KernelC-3(Visa)
  - KernelC-4(Amex)
  - KernelC-5(JCB)
  - KernelC-6(Discover)

  - KernelC-7(UnionPay)
- Interac

- Apple Pay® , Google Pay® , Samsung Pay®,Huawei Pay®
- AppleVAS

- Felica®
- Mifare–DESFire/Classic/Ultralight

Supported Standards
TheUNO-mini is compatible with the following standards:

- FCC*
- CE*
- UL*

- RoHS compliance
- ISO/IEC18092
- ISO/IEC14443TypeA&B
- ISO/IEC15693
- Mifare

Product Highlights

- Ultracompact contactless EMV card reader.
- Specially designed for integration into 3rd party applications.
- EMV L1, L2 approved enables fast integration and time to market.
- API is compatible with UNO-8.
- EMV modular architecture and kernels.
- Implements the latest chipset including:
  - Secured Cortex M33 microcontroller.
  - Full NFC compatibility, including card emulation.
- EMV L3 approved with Nayax EMV Core.

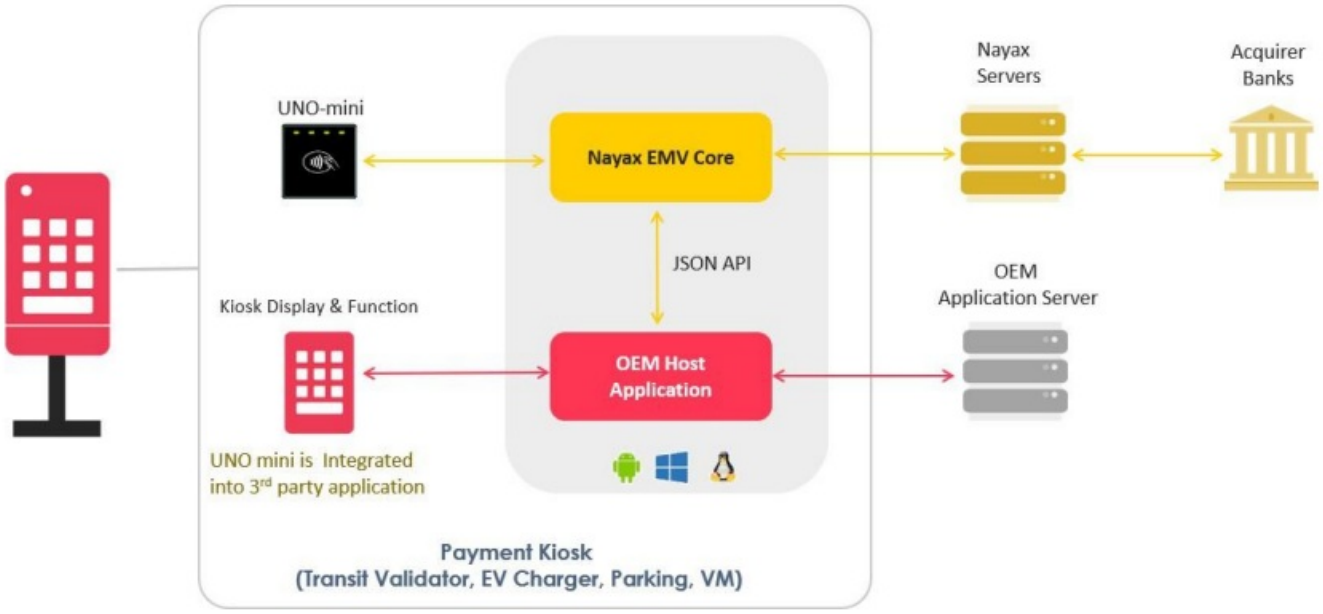


Figure1-2:NayaxSystemArchitecture

Technical Specifications

Here’s your information presented as a table for better clarity:

Item	Specifications
Power	5-12V DC 0.7W in Idle, 3W Peak
CPU	Arm® 32-bit Cortex®-M33 with TrustZone® & enhanced security features
CPU Speed	160 MHz
CPU Memory	Flash: 2 MB RAM: 786 KB
External Memory	Flash: 8 MB
Host Communications	USB 2.0 FS UART TTL
Contactless EMV	EMVCo L1 v3.x compatible Full NFC support (including card emulation)
Security	– 2 AES coprocessors, including one with DPA resistance – Public key accelerator, DPA resistant – True random number generator, NIST SP800-90B compliant
SAM Interfaces	x1 (microSIM)
LEDs	4 green (EMV)
Temperature	-35°C to 85°C
Humidity	Non-condensing: 10%–95%
Dimensions (H x W x D) [mm]	49.5 x 49.5 x 10.8 / 13.4 (see detailed dimension chart)
Connectors	– Main Connector: Molex 5054330871 (8 pins), see detailed connector chart – 1 x micro SAM (3FF)
Regulatory	FCC, CE, UL, RoHS, TQM

Warning: Power Supply Minimum Requirements

- Keeping the DC supply voltage within the specified allowed range is crucial to guarantee proper operation of the equipment.
- The use of an AC rectified power supply, which is not properly filtered, forms a risk of too-low voltage dips and hence should be avoided.
- It is recommended to check this issue with proper tools (e.g., oscilloscope) during the reader installation.
- For more details, contact the Nayax technical team.

Dimensions

All the dimensions are in millimeters.

Figure1-1:UNO-miniDimensions

Connector and Cable

UNO-mini includes one 8-pin Molex connector PN: 5054330871. Detailed connector specifications can be found at:
https://www.molex.com/en-us/products/part-detail/5054330871?display=pdf

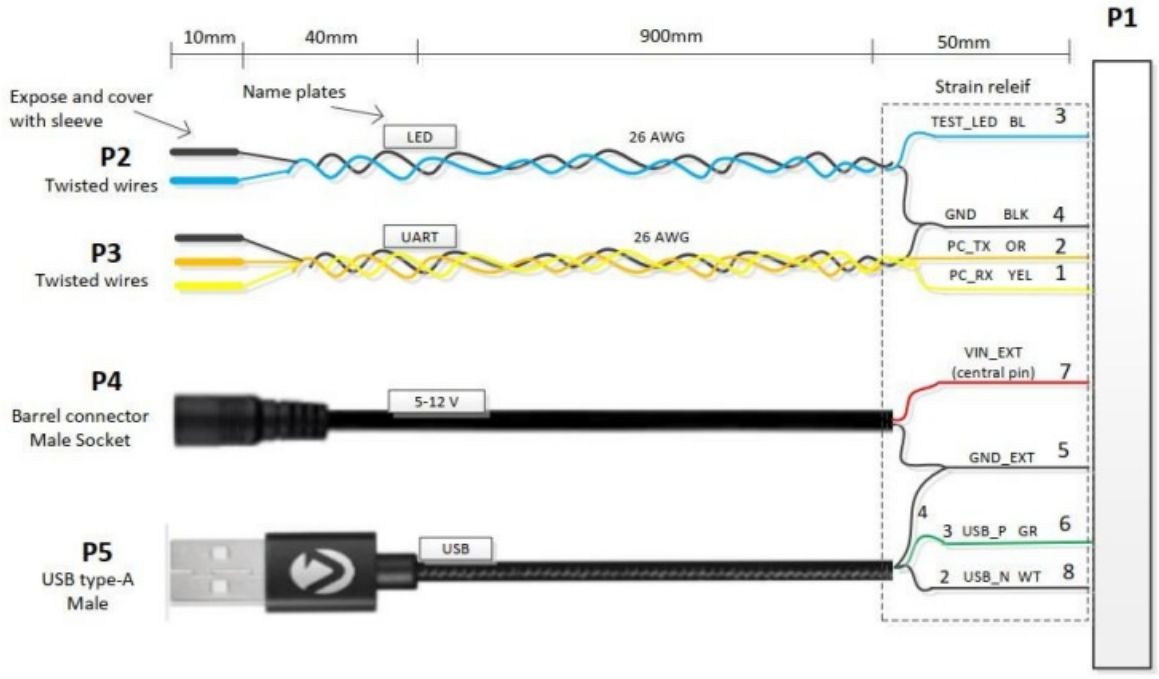


Figure2-2:UNO-MINICable

Pin #	Description
1	Host UART RX
2	Host UART TX
3	TEST LED
4	GND
5	GND_EXT
6	USB-P
7	Vin Ext (5-12V)
8	USB-N

NOTE: The cable is not included in the UNO-minimises-production Bill Of Materials (BOM).

Product Images

FCC & ISED Warnings

The FCC Wants You to Know
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician.

CAN ICES-3 (B) / NMB-3 (B)
This Class B digital apparatus complies with Canadian ICES-003.

IC STATEMENT
This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Modification statement
Nayax has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

Mobile Device
RF Exposure Statement: For FCC: This device is only authorized for use in a mobile application. At least 20 cm of separation distance between the (Product Name) device and the user's body must be maintained at all times.

Interference Statement
This device complies with Part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. this device may not cause interference, and
2. this device must accept any interference, including interference that may cause undesired operation of the device.

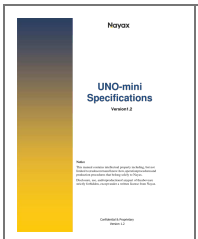
Wireless notice
This device complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the ISED radio frequency (RF) Exposure rules. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- **FCC ID**: 2AK6L-NOMINEE
- **ISED ID**: 10840A- UNOMINI

FAQ

Q: Can the UNO-mini be used in outdoor environments?
A: The UNO mini is designed for indoor use. It is not recommended for outdoor installations.

Documents / Resources

	NAYAX UNO-Mini Card Reader [pdf] User Guide 2AK6L-UNOMINI, 2AK6LUNOMINI, UNO-Mini Card Reader, UNO-Mini, Card Reader, Reader

References

- User Manual