Quick Start Guide

Identix MiniPad – rPad

This guide provides simple steps to quickly start using your new Identix miniPad or rPad UHF RFID reader

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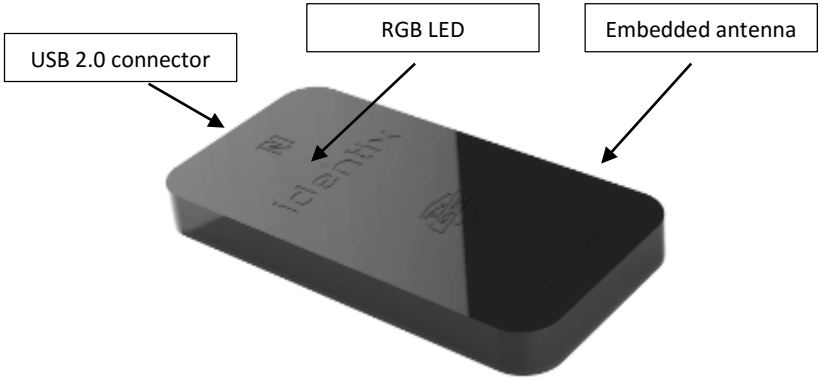
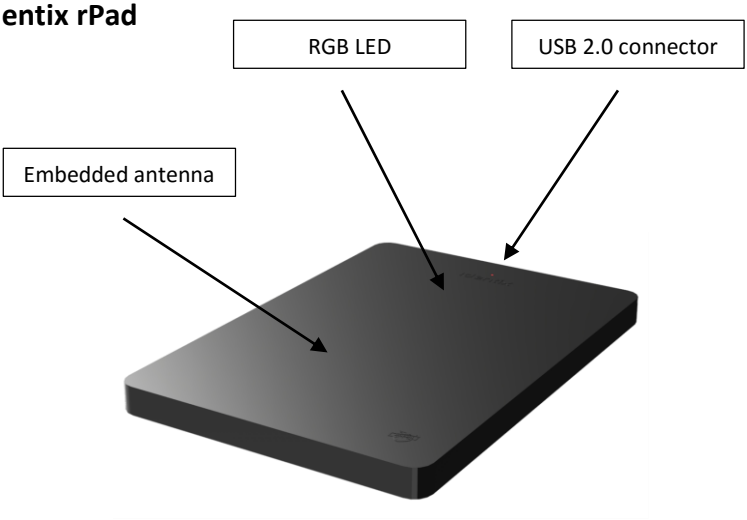
Box Contents

- 1 Identix miniPad or rPad
- 1 miniUSB cable
- 1 Quick Start Guide
- May include tag samples

Identix miniPad



Identix rPad



Before getting started, download and install the following on your PC:

https://idntx.zendesk.com

- Identix miniPad – rPad USB Driver for windows
- Impinj RS500 Software Utility
- Identix miniPad – rPad user's Manual
- The Software Developers Kit (SDK) for the miniPad and rPad is available for download at the same location. The SDK is available for Microsoft .NET C#. For other programming languages, please contact Identix.

Installing the miniPad – rPad USB Driver on Windows

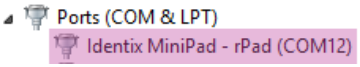
1) Download the *miniPad-rPad* Windows USB driver file from **https://idntx.zendesk.com**
2) Connect the miniPad or rPad to your PC using the mini USB cable provided.
3) Once Microsoft Windows detects the new device, set the downloaded INF file as the device driver
4) Windows will map a new virtual COM port to the connected miniPad / rPad RFID reader.

1) Open Windows Device Manager, search for the miniPad / rPad device, right-click on the device and then select Update Driver Software.
2) Browse your computer and find the location of the *miniPad-rPad.inf*, click Next
3) You may get a warning. If so, click Install this driver anyway.
4) You will get a success screen. Click Next.

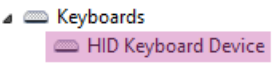
Configuring the device operating mode

The miniPad / rPad device can operate in two different modes:

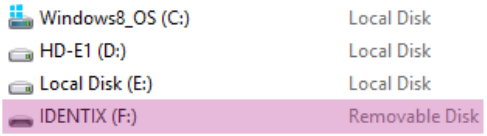
Transparent Mode. In this mode of operation, a host application controls the miniPad / rPad device. The host application communicates with the miniPad / rPad device using the IRI – Impinj Reader Interface - protocol. The connection between the host (PC) and the device is via a virtual COM (serial) port over USB. By default, miniPad / rPad operates in Transparent Mode.

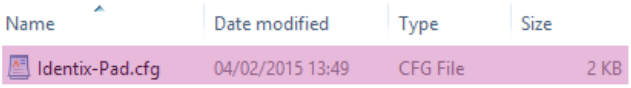


HID Keyboard Emulation. In this mode of operation, miniPad / rPad emulates a keyboard wedge. When reading RFID tags, miniPad / rPad sends reading data to the host computer as if it were a keyboard. In this scenario, the device operates autonomously sending data over sending data through a virtual keyboard (HID) connected to the USB port.



Modifying the configuration. A *configuration file* ("Identix-Pad.cfg") is stored inside a removable drive (labeled IDENTIX that mounts automatically when the miniPad / rPad device connects to the host computer), allows the user to switch between Transparent and HID Keyboard Emulation modes.





To change the operation mode between Transparent and HID, edit the entry "Opmode" on the configuration file. After saving the configuration file, the miniPad / rPad reader will automatically switch to the appropriate operating mode. All remaining configuration file entries are applicable when operating in HID Keyboard emulation mode only. Below is an example of the miniPad / rPad configuration file.

Opmode=T	; T for transparent mode, H for keyboard emulation (HID)
Region=0	; Set 0 for FCC (USA), 7 for ETSI (Europe), 13 for Anatel (Brasil) or consult Identix for other regions.
Inventory=D	; D for Dual Target, S for Single Target and SS for Single Target with Suppression
Session=1	; 0, 1, 2 or 3
TXPower=10	; Transmit power in dBm. The maximum accepted is 23dBm
HidReportFormat=0	; set 0 to report EPC data only or 1 to report EPC+TID
TIDlength=32	; defines the length of TID field (bits) to chips that are not Impinj Monza. Set to 0 for auto discovery (caution, very slow!)
HidReportSeparator=0x20	; ASCII character to be used as separator between EPC and TID in HID reports
HidReportCRcharacter=0xD	; ASCII character to be used as Carriage Return in HID reports
HidReportLFcharacter=0xA	; ASCII character to be used as Line Feed in HID reports
DecodeSGTIN96=False	; decodes encoded SGTIN96 EPC data into SGTIN13 (GTIN13 plus EPC serial number)
AddSerialToDecodedGTIN13=True	; includes the EPC serial number in GTIN13 decoded string
GTIN13SNseparator=0x2A	; ASCII character to be used as separator between decoded GTIN13 and serial number

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Reading Tags

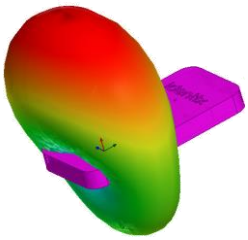
In Transparent Mode with the Impinj RS500 Tool

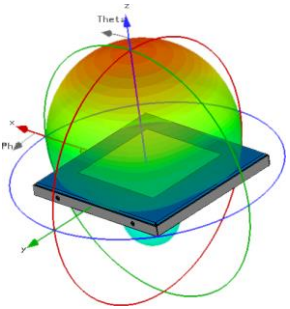
1) Copy the RS500 Development Tool.exe file from https://idntx.zendesk.com
2) Connect the miniPad or rPad to your PC using the miniUSB cable. At this point, the RGB LED, should go on with pink color.
3) Place UHF RFID tags on top of the miniPad or rPad embedded antenna.
4) Open the RS500 Development Tool software by double-clicking on the "RS500 Development Tool.exe" file.
5) Press the "Scan" button to detect the COM port corresponding to the hardware. Press the "Connect" button to connect to the hardware.
6) Under the "Inventory" tab, start an inventory by pressing the "Start" button.
7) At this point, the "Event Log" on the right hand side of the GUI will show the stream of EPCs of the tags that are read by the miniPad or rPad.
8) Try moving the tag relative to the antenna, or introducing a new tag, and observe the change in the reads displayed in the Event Log.

In HID Keyboard Emulation mode

1) Configure the miniPad / rPad reader to operate in HID Keyboard Emulation mode.
2) Open an application like Excel or Notepad.
3) Place UHF RFID tags on top of the miniPad or rPad embedded antenna.
4) See the tags reading results at the opened application.

Antenna Radiation Patterns. Below are the antenna patterns for minPad and rPad respectively. Antenna gains are -4dBi for miniPad and +8dBi for rPad.





Contacts

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Support https://idntx.zendesk.com

FCC Statement: §15.105 Digital Devices Statement. Class B Digital Devices.
Note: 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 into an outlet on a circuit different from that to which the receiver is connected or (4) consult the dealer or an experienced radio/TV technician for help.