

## NFC Emulate Keyboard Reader



If your pad or smart phone wants to read a NTAG213 chip for the NFC text (English string or digits only) or URL but this device has no NFC antenna built in, then this ER300N can help you.

**No need driver and software.**

**Just Plug and Play!**

***Ordering information:***

***Model No.: ER300N***

### **Contact Information:**

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## 1. Special Features

- Simulate keyboard NFC text reader
- Act as a HID USB keyboard device
- NFC NDEF protocol Text and URL, compatible NFC smart phone
- Support chip: NTAG213
- Max bytes:123
- Frequency: 13.56 MHz
- Typical time to read tags: <100ms
- Communication interface: USB
- Power supply : DC 5V, BUS power
- 2 LED indicator
- Support OS: Android, iOS, Linux, Windows, Macintosh,
- Mechanic and environmental characteristics:
  - Dimensions: 120 x80x16 (mm)
  - Operating temperature: -10 ~50 °C
  - Storage temperature: -20~70 °C
  - Relative humidity: up to 95%
  - Weight: 100g

## 2. Output mode

The ER300N is a NFC reader. This reader acts as a USB HID keyboard device. There is no extra software needed for ER300N, the user can just use it as a keyboard.

When ER300N is deployed, no software is needed. It uses standard USB drivers supplied by the operating system such as Android, iOS, Windows, Macintosh and Linux.

Before using the NFC NTAG213 tags, you need to write information into the tags. ER300N reader can strike up to 60 keys of the string written in the tags.

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### **Active Keys:**

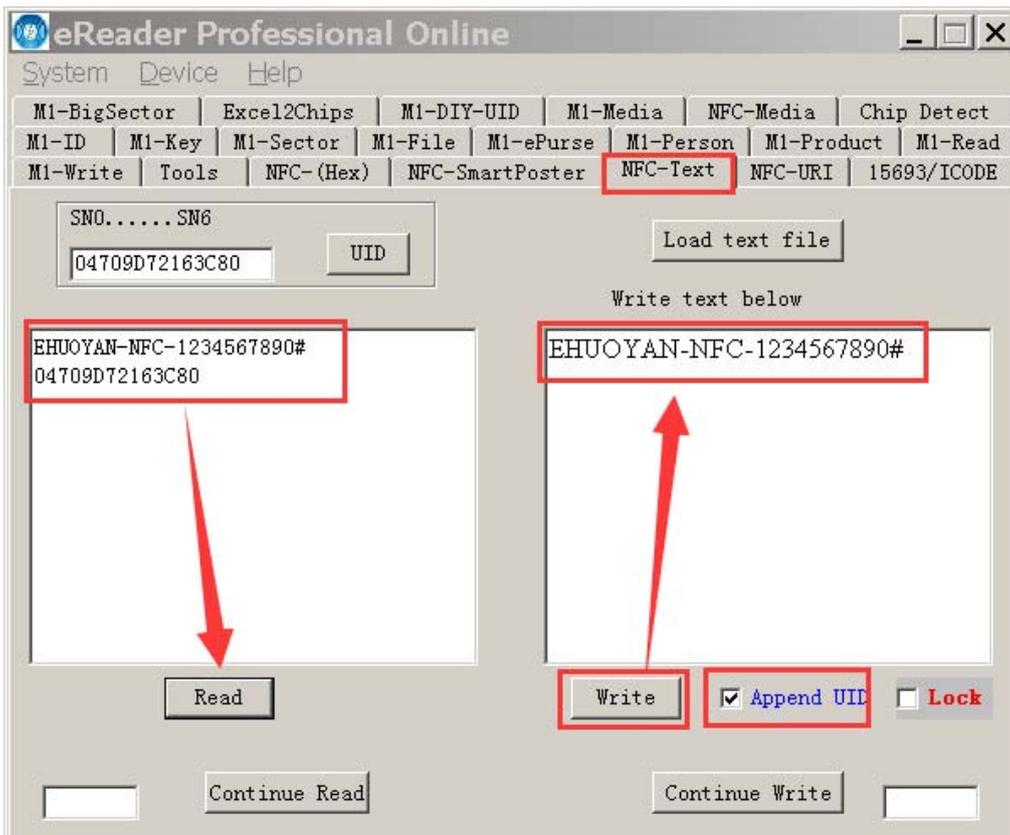
!'"#\$%&'()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[ ]^\_`a

bcdefghijklmnopqrstuvwxyz{|}, **TAB, Enter.**

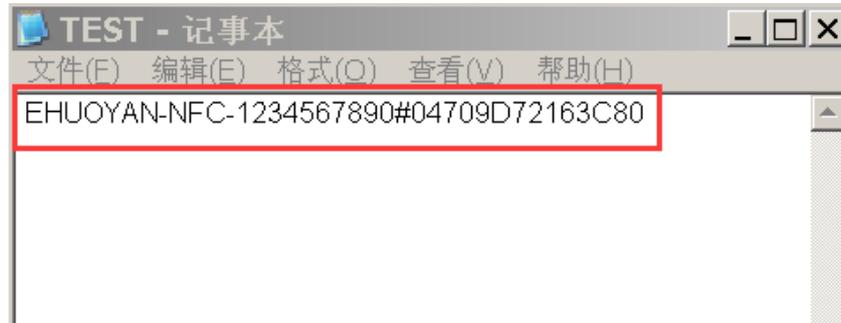
You can use a NFC smart phone to write NFC text into the NTAG213 chip, or if you can use a ER302 and eReader software to write it.



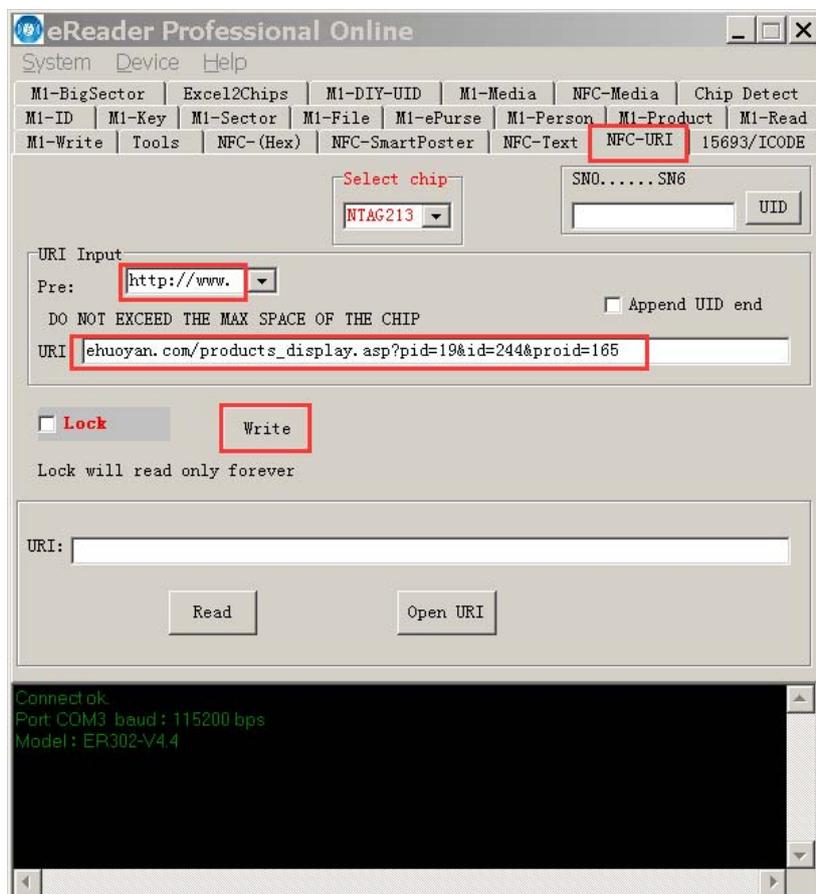
Below NFC-Text is written by eReader software.



Below is read the tag by the ER300N.



Below NFC-URL is written by eReader software.



You can locate the cursor on the web input box and read the tag, next is the output.

[http://www.ehuoayan.com/english/products\\_display.asp?pid=19&id=244&proid=165](http://www.ehuoayan.com/english/products_display.asp?pid=19&id=244&proid=165)

### 3. Device Connect

If you want to connect the ER300N reader to the smart phone or pad, then you

need to use an OTG converter to connect them. If you use a ER300N-M which has Micro USB connector then it can be connect to android pad or smart phone and need no OTG converter.

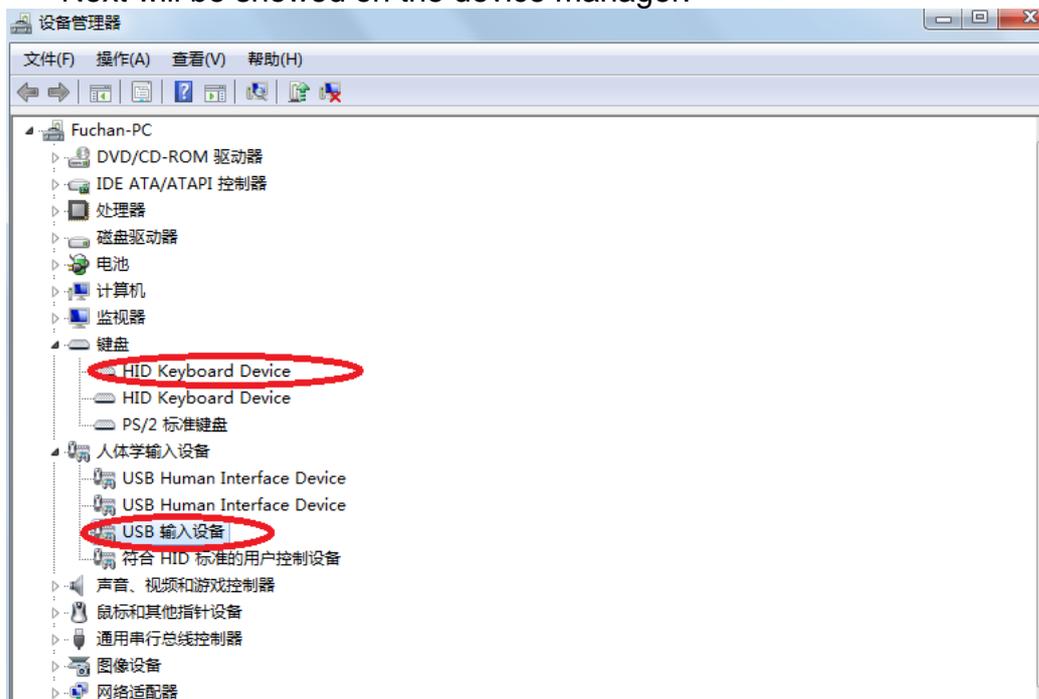
After power on the blue led will flash, it means that the reader is ready.

When plug the ER300N reader to the PC's USB port, the system will recognize it as HID keyboard device.



When plug the device to the usb port, the system will know it.

Next will be showed on the device manager:



It may show different with different system.

After installation successfully, open "Excel " or other application program to read the RFID Tag and the data will be shown on the screen .

## 4. Electrical Characteristics

### 4.1 Operating Condition Range

Relative humidity: up to 95%

| Symbol | Parameter           | Conditions | Min | Typ | Max | Unit |
|--------|---------------------|------------|-----|-----|-----|------|
| Tamb   | Ambient Temperature |            | -10 | 25  | 60  | °C   |
| VDD    | DC Supply Voltage   | DVSS = 0V  | 4.5 | 5   | 5.5 | V    |

Table 1 - Operating Condition Range

## 4.2 Current Consumption

| Symbol | Parameter      | Conditions   | Min | Typ | Max | Unit |
|--------|----------------|--------------|-----|-----|-----|------|
| IDVDD  | Supply Current | Reading card | -   | 35  | 50  | mA   |

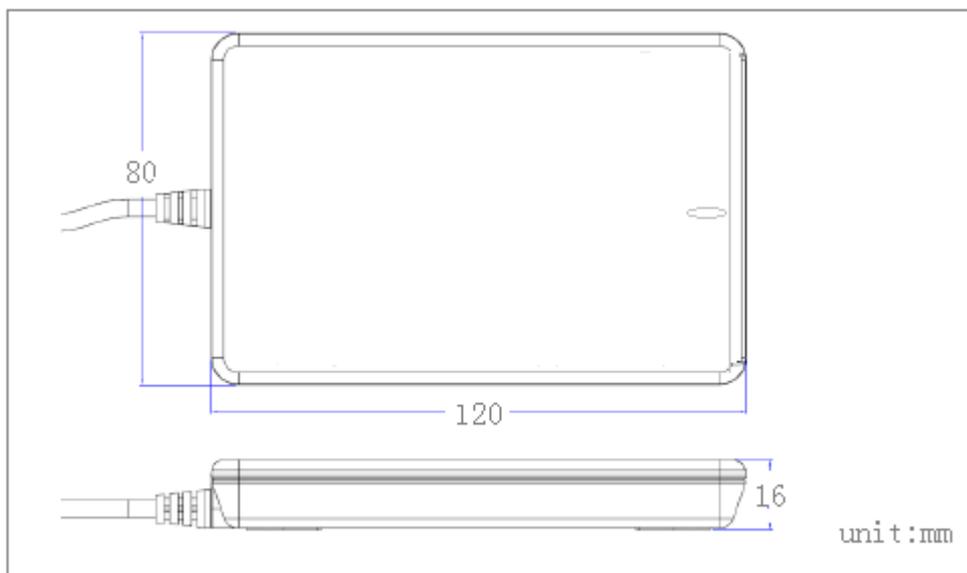
Table 2 - Current Consumption

## 4.3 Operating Distance

| Symbol | Parameter               | Conditions                      | Min | Typ | Max | Unit |
|--------|-------------------------|---------------------------------|-----|-----|-----|------|
| OD     | Tag size more than 20mm | Measured from the reader bottom | 0   | 40  | 60  | mm   |

Table 3 - Operating Distance

## 5. Layout



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## 6. Ordering information

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| Item No. | Description            |
|----------|------------------------|
| ER300N-A | NFC reader, A type USB |
| ER300N-M | NFC reader, Micro USB  |

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## 7. Legal information

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# ER300N Manual

