

Smart NFC Reader with Bluetooth Emulate Keyboard



Up to 6 types of modes include UID, Sector, URL, Text output.

Bluetooth Emulate Keyboard.

No need driver and software.

Just Plug and Play!

Auto scanning the tag and emulate keyboard print on the input of the app through the Bluetooth.

Ordering information:

Model No.: ER306BK

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1. Special Features

- Auto scan and Emulate keyboard NFC reader
- Act as a Bluetooth keyboard device
- Up to 6 types: **UID, Sector, NDEF URL, Text...**
- Support chip: ISO14443A/M1/UL/ NTAG213
- Frequency: 13.56 MHz
- Typical time to read tag(UID): 500ms
- Reading distance: up to 6 cm
- Communication interface: Bluetooth
- Power supply : DC 5V, USB power
- 2 LED indicator
- Support OS: Android, iOS
- Mechanic and environmental characteristics:
 - Dimensions: 120 x80x16 (mm)
 - Operating temperature: -10 ~50 °C
 - Storage temperature: -20~70 °C
 - Relative humidity: up to 95%
 - Weight: 120g

2. Output mode

The ER306BK is a smart NFC reader which has Bluetooth interface. This reader acts as a Bluetooth keyboard device. There is no extra software needed for ER306BK, the user can just use it as a Bluetooth keyboard.

When ER306BK is deployed, no software is needed. It uses standard Bluetooth interface supplied by the smart device and operating system such as Android, iOS.

The reader will auto scanning the tag and output the data to the smart device through the Bluetooth, and it will emulate a keyboard to print the data on the cursor which in the input box of the app or IE input box or any text file and excel file.

Note: set the input mode stay on the “En”.

Up to 6 types include UID, Sector, URL, Text and etc. By using a “**X Configure card**”, the user can change the reader to different mode. This reader is compatible with

ER300X reader(USB interface). On the different type of reader, please reference the same type of reader manual or datasheet.

The “X Configure Card” can configure the reader ER306BK to below different types:

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- 1) D10B30+EnterV56
 - 2) H08B30+EnterV56
 - 3) D10B03+EnterV56
 - 4) ASecto+EnterV56
 - 5) H47B03+EnterV56
 - 6) NFC213+EnterV56
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Each time the reader will change type to next. After configure successful then you can remove the “X Configure Card” away and use test card or else card to test.

Below is the description for the different types.

- 1) **D10B30+EnterV56** : (work same as *ER300D/ER200D/YHY202D*), read UID by the sequence B3B2B1B0 and convert into decimal 10 digits.
- 2) **H08B30+EnterV56** : read UID by the sequence B3B2B1B0 and output by hexadecimal 8 digits.
- 3) **D10B03+EnterV56** : read UID by the sequence B0B1B2B3 and convert into decimal 10 digits.
- 4) **ASecto+EnterV56** : (work same as *ER300A/ER200A/YHY201A*), read one sector or block, needs a writer and program to write the data into the M1 card.

5) **H47B03+EnterV56** : (work same as *ER300L/ER200L/YHY202L*), read UID by the sequence B0B1B2B3 and output by hexadecimal 8 digits(M1) or 14 digits(UL/NTAG21X).

6) **NFC213+EnterV56** : (work same as *ER300N/ER200N*), read the NFC chip NTAG213 of the URL or text inside based on the NDEF protocol.

If you customize the reader without “Enter” key, then the “+Enter” will not show.

[Note:]

D: Decimal

H: Hexadecimal

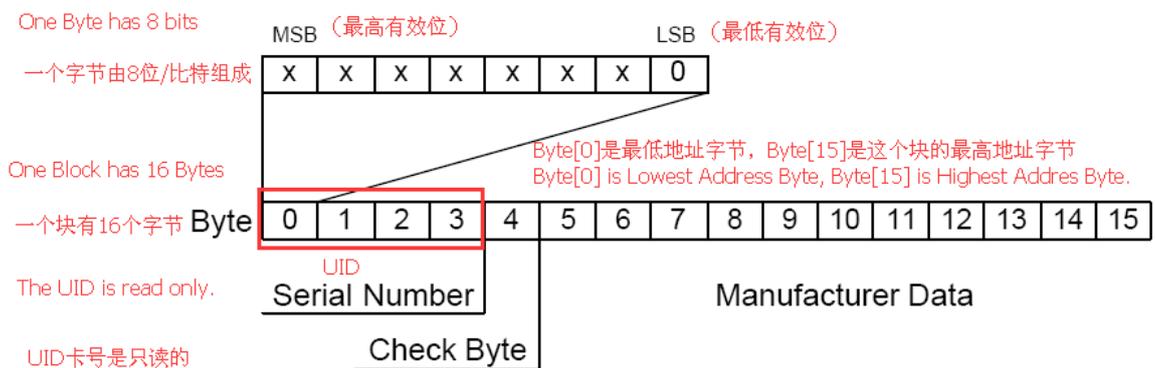
ASecto: A Sector

B03: by the sequence B0B1B2B3, Low Address Byte first.

B30: by the sequence B3B2B1B0, High Address Byte first.

NFC: NFC protocol, 213=NTAG213

Below is the sequence of the UID bytes in the block.



Usage examples: (open a text file and set the keyboard input on the “EN”) :

Example 1: Read the “ **X Configure Card**” and if the text file shows :

D10B30+EnterV56 , then move the card away and put M1 card on the reader, then the text file will show: **0197370578** (this number is depends on the UID of the card) .

Example 2: Read the “ **X Configure Card**” and if the text file shows : **H08B30+EnterV56** , then move the card away and put M1 card on the reader, then the text file will show: **0BC3A2D2** (this number is depends on the UID of the card) .

Example 3: Read the “ **X Configure Card**” and if the text file shows : **D10B03+EnterV56** , then move the card away and put M1 card on the reader, then the text file will show: **3533882123** (this number is depends on the UID of the card) .

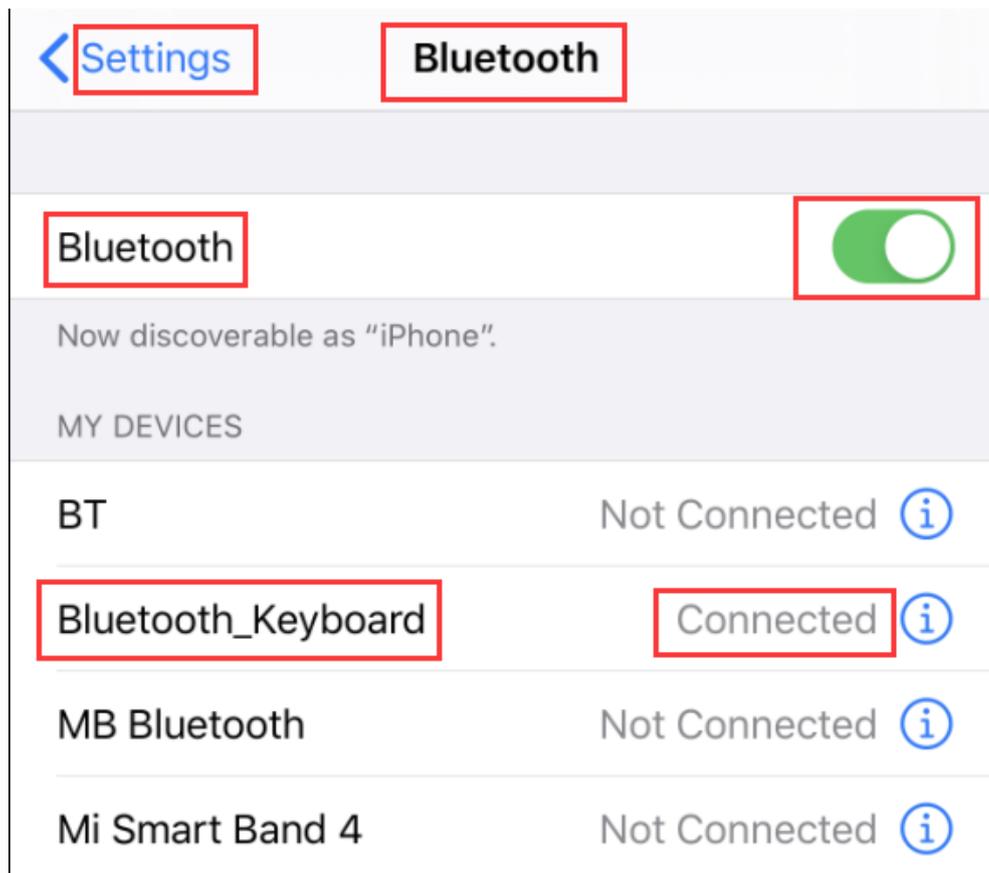
Example 4: Read the “ **X Configure Card**” and if the text file shows : **ASecto+EnterV56** , then move the card away and put M1 card on the reader, then the text file will show: **Sector1:Hello 1234567890** (this string is depends on what you write in the sector) .

Example 5: Read the “ **X Configure Card**” and if the text file shows : **H47B03+EnterV56** , then move the card away and put M1 or UL card on the reader, then the text file will show: **D2A2C30B** (or 0471B272163C80) (this number is depends on the UID of the card) .

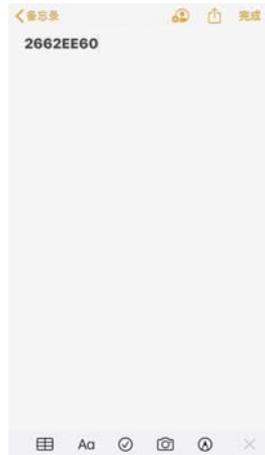
Example 6: Read the “ **X Configure Card**” and if the text file shows : **NFC213+EnterV56** , then move the card away and put NTAG213 tag on the reader, then the text file will show URL or text: <http://www.ehuoyan.com/> (or “**NFC TEXT:Hello nfc 123456789#UID:0433A192EC5A80**”)(this string is depends on what you write in the chip) .

3. Device Connect

Connect the reader’s USB cable to a USB power and then the blue led will start to flash. It means that the reader’s Bluetooth is ready to work, then you can open your smart device’s Bluetooth and try to find and connect such a device name: **Bluetooth_Keyboard**. If connect successful then the blue led on the reader will stop flash and light all the time.



Try to open a text file on the device, and switch the input on “En” mode, active the cursor on the text file, then put a card or tag on the reader, and if detect then the red led will light on and the data will print on the text file on the screen.



It may show different with different system.



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	50	70	100	mA

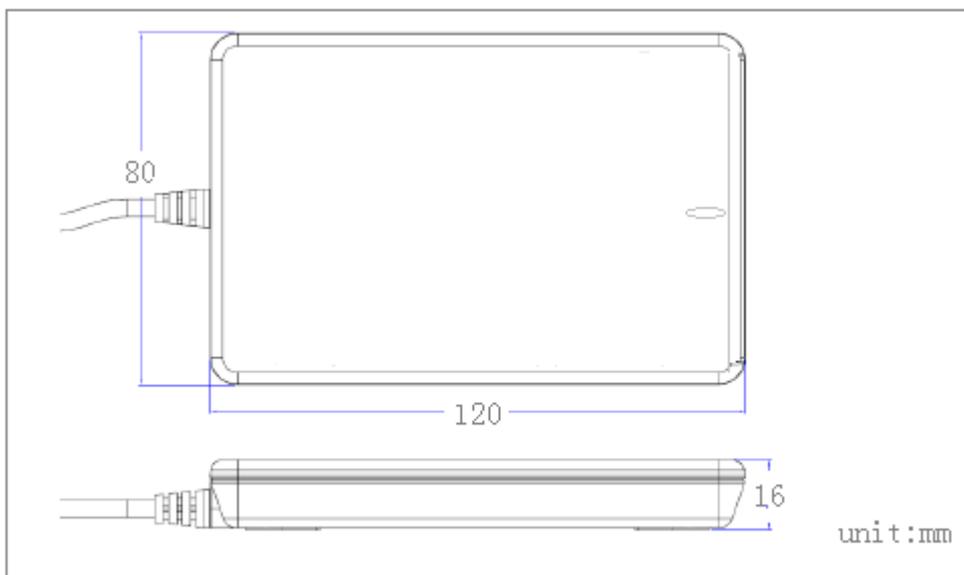
Table 2 - Current Consumption

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



6. Ordering information

Item No.	Description
ER306BK	NFC reader with Bluetooth Keyboard

7. Legal information

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