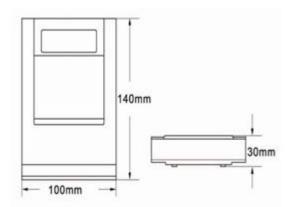
## 125 kHz 8H10D-format EM Reader Datasheet V1.6

(RAD-A200-U00)



- Work for EM4100 or compatible RFID card, output 8H10D format
- RS232 interface (9600, N, 8, 1)
- Reading Distance: 50mm ~ 80mm with ISO card
- Power: USB port



Item/Specs	RAD-A200-U00
Card	EM4100 or compatiable
Frequency	125 kHz
Dimensions(mm)	100 x 140 x 30
Baud rate	9600 (n,8,1)
Reading Distance	50mm ~ 80mm with ISO card
Communication port	USB
Power supply	USB

This reader reads Unique ID (UID) from EM tag, using a conversion rule called 8H10D to convert the Hexadecimal UID to decimal.

For example:

Original EM tag UID (Hex): 10 00 62 D9 B2

8H10D conversion rule: take last eight hexadecimal digits, 00 62 D9 B2, convert it to maximum 10 decimal digits.

Hexadecimal 0062D9B2 = Decimal 6478258

So its 8H10D format is: 0006478258

## 8H10D EM Transmission Format

Output Format – ASCII

STX	Data	CR	LF	ETX		
02H	10 ASCII	0DH	0AH	03H		

If the 8H10D format of the EM ID is 0012010405, and if your COM port tool can display HEX code, you will see:

02 30 30 31 32 30 31 30 34 30 35 0D 0A 03

	STX	Data									CR	LF	ETX	
	STX	0	0	1	2	0	1	0	4	0	5	CR	LF	ETX
ASCII	02	30	30	31	32	30	31	30	34	30	35	0D	0A	03

Note: Install a USB-to-Serial device driver before using is necessary. After installation, find a virtual COM port in Control Panel.