

# EM9939 PHILIPS I-CODE 2 HANDHELD READER

## SPECIFICATION

- Card / Tag : Philips i-Code 2. ISO15693 standard
- Read range : >= 5cm for standard ISO card
- Size (mm) :
- Weight (gm) :
- Operating temperature : -10°C to 70°C
- Operating Humidity : 0% to 90%
- Operating Ampere : 80mA
- Operating Voltage : 9VDC rechargeable battery or 7.5VDC to 12VDC power adaptor
- Low power consumption design : If no card / tag presents within 15 seconds, reader power off automatically. Fully charge battery can read XX piece cards / tags.
- Memory : Maximum 3000 records, each record has 8 bytes data.
- Clock : Dallas clock IC.
- Safety : Data retention for 20 years
- Data communication : RS232 interface.  
Parameters : Baud rate : 9600,  
Data : 8, Stop bit : 1, Check bit : N
- English Text Panel : 16 x 2 Text. Display time & Card CSN or 8 bytes card / tag data.
- Audio / Visual : LED and Buzzer
- Battery Low indication : Battery low, beep sound indication

## DATA FORMAT

- ① Philips i-Code 2 CSN (8 bytes)  
UID7 + UID6 +...+ UID0
- ② i-Code continuously 2 block data ( 8 bytes)  
Block 0-1 or 1-2 or 2-3 .... or 27-0 etc., Byte 0 first.

	Byte0	Byte1	Byte2	Byte3	
Block-4	UID0	UID1	UID2	UID3	Unique Identifier(lower bytes)
Block-3	UID4	UID5	UID6	UID7	Unique Identifier(higher bytes)
Block-2	Intemally used	EAS	AFI	DSFID	EAS, AFI, DSFID
Block-1	00	00	00	00	Write Access Conditions
Block0	X	X	X	X	User Data
Block2	X	X	X	X	
Block3	X	X	X	X	
Block4	X	X	X	X	
Block5	X	X	X	X	
Block6	X	X	X	X	
Block7	X	X	X	X	
Block8	X	X	X	X	
Block9	X	X	X	X	
Block10	X	X	X	X	
Block11	X	X	X	X	
Block12	X	X	X	X	
Block13	X	X	X	X	
Block14	X	X	X	X	
Block15	X	X	X	X	
Block16	X	X	X	X	
Block17	X	X	X	X	
Block18	X	X	X	X	
Block19	X	X	X	X	
Block20	X	X	X	X	
Block21	X	X	X	X	
Block22	X	X	X	X	
Block23	X	X	X	X	
Block24	X	X	X	X	
Block25	X	X	X	X	
Block26	X	X	X	X	
Block27	X	X	X	X	