



Doc name: 07-PS-D8 RFID Reader 1.00.docx

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Version History

Date	By	Changes	Version
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1.0. Introduction

The D8 is a PC-linked RFID reader, developed based on 13.56MHz contactless technology. It has 2 SAM (Secure Access Module) slots which can provide multiple high-level securities in contactless transactions. Post-deployment firmware upgrade is also supported, eliminating the need for additional hardware modification.

D8 also supports RS232 serial communication, so it can be connected to many non-USB host devices.

D8 supports ISO 14443 Type A and B cards, MIFARE®, ISO 15693 I-CODE. With its powerful RFID features, it can be applied in banking, transportation, healthcare, retailing and access control areas.



Figure 1-1 D8-E Appearance

2.0. Features

- USB 2.0 full speed
 - HID compliance
 - Firmware upgradable
- Contactless smart card interface
 - Mifare classic
 - ISO14443 Type A
 - ISO14443 Type B
 - ISO15693 (Optional)
- 2 SAM slots compliant with ISO 7816
- 1 bi-color LED indicator
- Support buzzer indication
- RS232 serial interface (Optional)

3.0. Supported Card Types

3.1. SAM

D8 operates with SAM cards that follow:

- T=0 or T=1 protocol
- ISO 7816-Compliant Class B (3V)

3.2. RFID Cards

D8 supports the following contactless cards:

- ISO 14443-Compliant, Type A & B Standard, parts 1 to 4, T=CL protocol
- MiFare® Classic
- ISO 15693 I-CODE (Optional)

4.0. Typical Applications

- e-Healthcare
- Transportation
- e-Banking and e-Payment
- e-Purse and Loyalty
- Network Security
- Access Control



5.0. Technical Specifications

Physical Specifications

Dimensions	123mm (L) x 95mm (W) x 27mm (H)
Case Color	White
Weight	300g

USB Device Interface

Protocol.....	USB HID
Type.....	Four Lines: +5V, GND, D+ and D-
Connector Type	Standard Type A
Power Source.....	From USB port
Speed	USB Full Speed (12 Mbps)
Supply Voltage	5 V
Supply Current	Max. 300 mA
Cable Length.....	1.5 m fixed cable

Serial Interface (Optional)

Type.....	Serial RS232
Power Source.....	From USB
Speed	115200 bps
Cable Length.....	1.5 m fixed cable

Contactless Smart Card Interface

Standard.....	ISO-14443 A & B part 1-4, ISO-15693 (Optional)
Protocol.....	Mifare [®] Classic Protocols, T=CL, I-CODE(Optional)
Smart Card Read /Write Speed	106 kbps, 26.48 kbps
Operating Distance	Up to 50 mm
Operating Frequency.....	13.56 MHz

SAM Card Interface

Number of Slots.....	2 ID-000 slots
Card Connector Type.....	Contact
Standard.....	ISO/IEC 7816 Class B (3V)
Protocol.....	T=0; T=1
Smart Card Read /Write Speed	9,600-115,200 bps

Built-in Peripherals

Buzzer.....	Monotone
LED Status Indicators.....	1 bi-color LED for indicating status (green and red)

Operating Conditions

Temperature.....	-10°C – 60°C
Humidity.....	10% to 90%, non-condensing

Application Program Interface

PC-linked mode	Vendor Specific
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Certifications/Compliance

ISO/IEC 7816, ISO/IEC 14443, USB 2.0 Full Speed

Supported Operating Systems

Windows[®] XP, Windows[®] 7, Windows[®] 8.1, Windows[®] 10, Linux[®]



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