FEITIAN

bR301 DATA SHEET

V1.1

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Contents

1.1 Title

bR301 V2.0

Bluetooth Smart Card Reader

1.2 Introduction

FEITIAN Card Reader bR301

The FEITIAN bR301 Bluetooth smart card reader has been designed with convenience and security in mind. With convenience and security at it's core the bR301 allows users to quickly pair to any Bluetooth enabled device and use their smart card to perform a wide scale of smart card applications including authentication, encrypting/decrypting emails and documents, digitally signing documents and all PKI applications used now on their desktop. EMV card payments can also be integrated offering EMV Level 1 compliance. Seamlessly pair the bR301 with your mobile phone, tablet or desktop securely to expand PKI applications to mobile device allowing more convenience, efficiency and security. The bR301 allows current PKI cards more mobility and not restricted to only traditional desktop smart card readers. In additional through the microUSB port the bR301U also functions as a standard CCID and PC/SC smart card reader on Windows, Mac and Linux.

The bR301 uses Bluetooth 4.0 LE, allowing the user up to 18 hours of continuous usage. While paired with your device all communication is encrypted using AES 256 ensuring a secure connection for all sensitive data. Four light colors are presented on the front of the bR301 to alert you of the status, a blue light signals that the reader is on, a white light indicates the transmission of data between the bR301 and the device, a yellow light alerts the user that the battery is low and a red light warns the user to charge the battery. To charge the battery, simply connect the bR301 using the microUSB port and USB cable.

The bR301 suites customers that already have PKI smart card environment in place in their organization, where security concerns are the most salient and satisfies the demand for a flexible mobile solution for ID authentication, e-commerce, e-payment, information security and access control in enterprise, healthcare, government and payments.

1.3 Feature

- **Use Bluetooth dual-model, Support Bluetooth 3/4**
- **Compliant with PC/SC, CCID Standards**
- **Support ISO-7816-1/2/3 T=0 and T=1,Class A,B and C Cards**
- **Support upgrading firmware through USB cable**
- **Support 3DES/AES DUKPT(derived unique key per Transaction)**
- **Provide 255bytes flash for user**
- EMV Level 1 Certified
- MFI Certified
- **Support Multi-platform**
  - **Mobile platform (Bluetooth): Apple iOS 3.2+/Android/Blackberry/Windows Tablet**
  - **PC platform dual port(USB+Bluetooth): Window/Linux/UNIX /Mac OS X**
- **Provide re-chargeable 800mAh battery, around 10-11h (run-time), standby at least 100hours**
- **The firmware can't be read, Support Anti-reverse engineering**
- Four lights to show reader's status**(reader /card / battery)**
- **Customizable items Logo/case color/Shell surface treatment process**

1.4 Specification

Type	Contents	
Basic Parameters	**Parameter**	**Value**
	Working Voltage	3V
	Working Current	< 55mA
	Communication Rate	10753~344086bps
	Supported Card Type	T0, T1, CLASS B, CLASS C, CLASS BC
	Communication Rate with iOS	115200bps

	Working Temperature	0°C to 50°C (32 to 122°F)
	Storage Temperature	- 20°C to 70°C (-4 to 158°F)
	Operating Humidity	60 to 90%RH non-condensing
	Storage Humidity	60 to 90%RH non-condensing
	Port	Bluetooth/Micro USB
	Device Type smart card	Contact(smart card)
	Enclosure Type	External
	Interface Type	Bluetooth Dual Module, support Bluetooth 2.1+/3.0/4.0
	Expansion Slot(s)	1 x Smart Card
	Battery	800mAh/re-charging and replacement
	Charging Port	Micro USB
	Dimension	64mm(2.51in)wide*85 mm(3.35in)high*13.5mm(0.53in)thick
	Material	PC+ABS
	Card Deck	8 contact points (ISO7816 standard) 100,000 plugging and unplugging times
	Supported OS	iOS/Android/Blackberry/Windows/LINUX/UNIX/MAC OS X
	Certification	CE/FCC/MFI/RoHS/EMV Level 1
Wireless Communications	Communications protocol	2.4GHz frequency ISM band. IEEE 802.15.1(Bluetooth) with full security enabled
	RF Transmissions Range	Less than half a meter
	Data Throughput	750kb/s to 1MB/s
	Communications data encryption	AES-128
	Customizable items	Logo/case color/ Shell surface treatment process