MZR02 SERIES

Fingerprint Smart Card Reader

Get Fingerprint Scanner and secure contact ISO/IEC 7816 and contactless 13.56 MHz technologies in one device.

MZR02 is the ideal combination of fingerprint sensor,contact, contactless, and near field communication (NFC) technologies. Supporting fingerprint biometrics, ISO/IEC 7816 contact cards, 13.56 MHz contactless technology, and NFC, this PC-linked Fingerprint Dual Interface Reader is suitable for any smart card application where multifactor authentication is needed for higher security without sacrificing convenience.

MZR02 is built with an ultra-thin press-type optical single-finger fingerprint module, using patented and patent-pending fingerprint technology, It has the characteristics of low power consumption, high sensitivity and high signal-to-noise ratio.

It can realize two-way fingerprint entry and comparison, and perfectly analyze touch and incomplete fingerprints in various dry and wet environments. Complies with FBI PIV-071006, Mobile ID FAP 20 standards..

With its all-in-one concept, this multi-function device of international standard protocol can be easily connected to PC and mobile portable terminal. It is widely used in various information security fields such as secure identity authentication, PKI key authentication, fingerprint data collection, digital signature authentication, identity certificate issuance, etc.

Features:

- User Convenience, ergonomic design
- Compliant with PC/SC, CCID Standards
- Supports ISO/IEC 7816 Part 1 to 4
- Supports ISO/IEC14443, ISO/IEC18092
- Supports Windows, Android, Linux
- FBI PIV-071006, Mobile ID FAP 20
- High-quality fingerprint image
- Dynamic fingerprint detection
- High-speed image acquisition
- Logo, case color, and shell surface treatment process customizable

* The fingerprint sensor can be customized to Suprema BM-SLIM2 *

	MRZ02	MZR02-SCR
Contact card	√	√
Contactless card	√	X
Fingerprint	√	√

Parameter	Details
Host Interface	USB 2.0 CCID (USB 1.1/3.0 compliant)
Communication Speed	12 Mbps (USB 2.0 full speed)

Fingerprint Sensor	
Collection window area	16.4 mm * 21.1mm
Collection effective area	15.24mm * 20.32mm
Sensor resolution	500 DPI±1%
Sensor pixel area	300 * 400 pixels
Image dynamic range	210 levels
Grayscale image	8-bit, 256 levels of gray
Image frame rate	30 frame/Sec
SDK development kit	C++, JAVA

Contact Smart Card Interface	
Supported Standards	ISO/IEC 7816 Part 1 to 4 ,classes A/B/C (5V, 3.3V, 1.8V)
Contact Smart Card Protocols	T=0, T=1;
Smart Card Interface Speed	Up to 600 kbps (depending on card) , TA1=97
Smart Card Clock Frequency	ISO/IEC 7816 compliant up to 5 MHz; Operates up to 12 MHz
Smart Card Detection	Card present switch; Automatic power on/off; Short circuit protection
Contact Card Slot	ID-1 Sliding Contact Socket (8 pin)

Contactless Smart Card Interface	
Supported Contactless Standards	ISO/IEC 14443 A&B, ISO/IEC18092
Protocols	T=CL
Supported Contactless Card ICs	MIFARE® Classic Family, MIFARE Ultralight Family, MIFARE Plus Family, MIFARE DESFire Family, FeliCa™, NFC Forum Tag types 1/2/3/4
Data Transfer Rate	106/212/424/848 kbits/s, depending on card IC

Driver and Software	
PC/SC Driver	PC/SC Specification Ver. 2.01.14 for: • Windows® 7/8/10/11 (32 and 64 bit), Windows® Server 2008/2012/2016/2019, WindowsXP, • Linux 2.6.x, and 3.x, 4.x, 5.x (32 and 64 bit), • Android 4.0 and higher
Software	PC/SC API; CT-API (through wrapper on top of PC/SC); M-Card API (through wrapper on top of PC/SC)

Operating Conditions	
Power Supply	USB Bus-powered
Power Consumption	<220 mA, excluding smart card; < 400 mA, with smart card; < 600 μA in Standby Mode
Dimensions(L x W x H)	102.5 x 67 x 29.5 mm
Weight	195 g ± 5%
Operating Temperature Range	0° to 50° C (32° to 122° F)
Storage Temperature Range	-25° to 85° C (-13° to 185° F)
Operating Humidity Range	Up to 95% RH non-condensing
Connector	1.5m USB cable with USB type A connector
Status Indicator	Dual color LED
Firmware	SmartOS™
Firmware In-Field Upgradeable	Yes

Certifications / Compliance	
Systems/Standards	ISO/IEC 7816, ISO/IEC 14443, USB 2.0 Full Speed, CCID, Microsoft® WHQL,FBI PIV-071006, Mobile ID FAP 20
Regulatory/Environmental	CE, RoHS

*TECHNICAL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE.

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For more information:
www.mttek.hk
www.markland.com.cn