R502-CL

CCID SMARTCARD READER

▶ Supports ISO-14443 contactless smart cards

▶ NFC compliant

▶ Supports MIFARE cards

▶ PC/SC and CCID compliant

CHECKID
HTTPS://CHECKID.MOBILE-ID.VN

Build-in antenna

ISO/IEC 14443 (A and B) standard Mifare S50/S70/Ultralight C cards

Card clock Frequency: 13.56MHz

106kbps, 212kbps, 424kbps, 848kbps communication speed (Depends on card)

0.3 second for read/write Mifare© card CSN

Open UID(User ID) function Support Extended APDU Encrypted firmware upgrade

Windows 2000 / XP / 2003 / Vista / 2008 / 7 / 8, Linux Kernel 2.6+, macOS X, Android(OTG)

CHECKID Reader R502-CL is a contactless smart card reader. It is based on CCID Driver. It supports contactless cards compliant with ISO 14443 and contactless cards following Mifare standard. Developers use it as a platform to generate and deploy related products and services. Moreover, Reader R502-CL is a terminal unit which is seamlessly integrated to all major systems of operation. Additional features such as the built-in inclusive support for different smart card interfaces has facilitated the wide scale and cross industry adoption of Reader 502-CL. R502-CL is a terminal interface device for smart card applications and system integrations. It can be widely used in industries or applications requiring electronic payment and authentication, especially suitable for the high security fields. It is an optimal solution for authentication, e-commerce, financial organizations, access control etc.

Applications

R502-CL is high speed smartcard reader product, it can using financial systems, e-commerce, e-government, e-banking, digital signatures, authentication, network access control, online games, recharge payment, ticketing system, parking and access control, public transportation system.

Security feature

Firmware cannot be read out. Anti-reverse analysis
Short circuit protection and overcurrent protection
Do not contain any users' sensitive data in product, such as password.
PCB board has a 5mm distance with reader shell.

Extension and maintenance

Product can be extended and disassembled.
Firmware can be extended, customized and updated.

Reliability

The period of hardware usable is at least 5 years.
Frequently read/write 200 times will not lead the system down or error.
Continuously using 48 hours will not lead error occurrence rate exceed 3‰.

Specifications

Interface type	USB 2.0 CCID (12Mbps)	Hardware Security	Short circuit protection Thermal protection Over-voltage protection High security level chipset Electrostatic prevention
Supported Contactless Card	Speed: 106kbps, 212kbps, 424kbps, 848kbps (Depends on card) Clock Frequency: 13.56MHz ISO 14443 Type A and Type B, Mifare© Protocol, Felica® protocol	Firmware Security	Firmware encryption mechanism Firmware upgradability in encryption Firmware cannot be read out Anti-reverse analysis
Size	120 × 80 × 25.6 mm	Supported OS	Win2000+ / Linux / macOS X / UNIX / Android(OTG)
Weight	80g		
Material	ABS+PC	Standard	ISO 14443 Standard Felica® Standard Mifare© Standard EMV Level 1 Standard PC / SC Standard USB 2.0 Standard CCID Standard
Status Indicator	Blue and Red LED		
Working temperature	0°C ~ 60 °C		
Storage temperature	-20°C ~ 85°C		
Humidity	≤90% (non-condensed)	Certification	CE / FCC / RoHS / EMV Level 1 / LTIC / BSMI / UL
Dust-Proof	IP54		
Power supply	USB port 5V DC	API Standard	PC / SC Lite / WINSCARD API / CT-API
Working current	170mA without any card, 230mA with contactless card	Meantime Between Failure (MTBF)	500,000 hours
		Warranty	Two-year warranty