

## CardMan® 5121 PC-Linked 13.56 MHz RFID Smart Card Reader

OMNIKEY, one of the world's leading manufacturers of innovative smart card readers, has developed a practical and affordable dual interface smart card reader. The CardMan® 5121 combines the advantages of contactless and contact smart card technology in a single USB desktop device.



### OMNIKEY's CardMan 5121

The CardMan 5121 is a dual interface PC-linked reader that will read/write to both a 13.56 MHz contactless smart card and virtually any contact smart card. The dual interface feature economically supports end-user environments where both contactless and contact smart card technology may be in use.

### Purpose of a Dual Interface Reader

Many end-users currently use a contactless smart card for building access, as a corporate or student ID, or for transit or cashless vending applications. The CardMan 5121 provides an economical means for end-users to implement new PC-linked applications without having to re-badge.

The addition of contact smart card capability allows for future expansion as needs change or as users within the facility require different levels of security or functionality. Should you require contact smart card functionality only, OMNIKEY offers a diversified product portfolio that is designed to support any smart card on any computer for any application.

### Supported Applications

The CardMan 5121 allows users to experience the convenience, speed, and security of contactless technology for applications including log-on to Windows®, networks, websites, or the secure storage of user names, passwords, and personal information. The use of contactless smart card technology for PC-linked applications is limited only to your imagination!

### Contactless Smart Cards Supported

The CardMan 5121 is based on a 13.56 MHz contactless smart card interface that is compliant with ISO specifications 14443 A and B and 15693. The reader works with a variety of 13.56 MHz contactless smart cards including, but not limited to:

- Philips: MIFARE®, DESFire®, MIFARE ProX®, SMART MX, and i.code
- HID: *iCLASS*®
- Texas Instruments: TagIT®
- ST Micro: x-ident, SR 176, SR 1X 4K
- Infineon: My-d (in secure mode UID only)
- Atmel: AT088RF020
- KSW MicroTech: KSW TempSens

If you are using a 13.56 MHz contactless smart card for other applications, use the same card for PC-linked applications today!

Consistent with OMNIKEY's tradition of offering robust, technically superior firmware and driver support, the CardMan 5121 guarantees the highest level of interoperability available on the market. By sharing the same state-of-the-art technology features of the CardMan 3121, OMNIKEY's contact smart card reader with USB interface, compliance with major standards such as ISO 7816, PC/SC, Microsoft WHQL, and EMV 2000 Level 1 specifications is guaranteed.

## CardMan® 5121

Host Interface	
USB 2.0 CCID <sup>1</sup> [also supports 1.1]	✓
Transmission speed	12 Mbps
Power supply	Bus powered
Contact Smart Card Interface	
Compliant with ISO 7816 and EMV <sup>2</sup> 2000 Level 1	✓
Supports T=0, T=1	✓
Supports 2-wire: SLE 4432/42 (S=10) 3-wire: SLE4418/28 (S=9)	✓
Supports I <sup>2</sup> C (S=8)	✓
Supports SLE 4404	✓
Card size	ID - 1 (full size)
High performance smart card interface (up to 420 Kbps when supported by card)	✓
Smart card clock frequency up to 8 MHz	✓
Supports 5V, 3V, and 1.8V smart cards	✓
Supplies 60 mA current to power the smart card	✓
Smart card movement detection with auto power-off	✓
Automatic detection of smart card type	✓
Short circuit and thermal protection	✓
8 pin handling (C4 / C8 supported)	✓
Contactless (RFID) Smart Card Interface	
ISO 14443 A (424 Kbps transmission rate depending on card)	✓
ISO 14443 B (424 Kbps transmission rate depending on card)	✓
ISO 15693 (26 Kbps transmission rate depending on card)	✓
Other Features	
Single LED status indicator (green=ready, red= busy)	✓
Reader can be placed horizontally or vertically on a heavy base (100gr) or adhered to a PC monitor with an attachment pad	✓
Options	
Customer specific logo and/or label	On request
Customer specific colors	On request
Jumbo heavy base (429 gr)	On request

1 = Chip Card Interface Device 2 = Eurocard® MasterCard® Visa® 3 = Windows® Hardware Quality Labs 4 = Homebanking Computer Interface



Insert contactless smart card in the slot to use as a cardholder mechanism.



Use a contact smart card in the same reader for your contact smart card applications!

Compliance	
Microsoft® WHQL <sup>3</sup> certified	✓
EMV 2000 Level 1 certified	✓
ISO 7816	✓
HBCI <sup>4</sup>	✓
USB 1.1 and 2.0	✓
CCID (contact interface only)	✓
API	
PC/SC driver	✓
CT-API (on top of PC/SC - for contact interface)	✓
OCF (on top of PC/SC - for contact interface)	✓
Synchronous API (on top of PC/SC - for contactless interface)	✓
PC/SC Driver Support	
Windows® 98	✓
Windows® ME	✓
Windows® 2000	✓
Windows® XP	✓
Windows® CE 3.0 / CE.NET (depending on hardware)	✓
Linux®	✓
Mac® OS X (for contact interface only)	✓
Hardware Specifications	
Colors	Two-tone gray (standard)
Dimensions	80 mm x 67 mm x 28 mm 3.15" x 2.64" x 1.1"
Weight (including heavy base and adapter)	200 gr / 7.1 ounces
Operating temperature	10-55°C / 32-131°F
Operating humidity	10-90% rH
Composition	ABS
Connector cable	180 cm / 70.9"
Durability	100,000 Insertions
Meantime between failure (MTBF)	500,000 Hours
Safety and Environmental Standards	
CE	✓
FCC	✓
UL	✓



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