



OMNIKEY® 5421 Reader



CONTACT AND CONTACTLESS USB SMART CARD READER

- **Reliable** - Proven OMNIKEY® driver and hardware technology.
- **Versatile** - Ideal for end-user environments using both contact and contactless smart card technology and migration scenarios.
- **Interoperable** - Supports iCLASS®, MIFARE® and MIFARE DESFire® as well as tags and new technologies such as NFC enabled devices.
- **Compliant** - Supports ISO 14443 A / B and 15693 and the ISO 7816 industry standards for contact cards.

CONTACTLESS SMART CARDS SUPPORT:

- HID: iCLASS®
- NXP: MIFARE®, MIFARE® Ultralight, MIFARE DESFire®, SMART-MX and ICODE (including credentials emulated by mobile phones in NFC card modulation mode)
- NFC Tag Types 1, 2 and 4
- Texas Instruments: TagIT®
- ST Micro: x-ident, SR 176, SR 1X 4K
- Infineon: My-d (in secure mode UID only)
- Contactless 2048 bit key generation in RSA mode (JCOP / SMART-MX)

The OMNIKEY® 5421 represents the ultimate combination of contact and contactless technology in a single device. The solution features a dual-interface, PC-linked reader that reads / writes to both a 13.56 MHz contactless smart card and virtually any contact smart card to support environments where both contact and contactless smart card technologies are required.

Utilizing contactless smart card technology for PC-linked applications, thin- and zero-client environments the reader provides users with the convenience, speed and security for applications such as user authentication to PCs, software, cloud-based applications, networks and web sites.

Known for high reliability in the field, the OMNIKEY 5421 reader is based on the proven driver and hardware technology to ensure greater stability, durability and compliance.

The reader supports the most common high frequency cards on the market including iCLASS®, MIFARE® and MIFARE DESFire®. It is also interoperable with NFC-enabled devices and tags.

For design flexibility, the professional line desktop housing aligns seamlessly with any modern working environment. It can be ordered with several accessories and mounting options.

FEATURES:

- Native CCID implementation supporting WINDOWS^{*}, LINUX^{*} and MAC^{*} operating systems for contact reader part
- Supports three ISO standards for contactless cards (ISO 14443 A / B and 15693) and the ISO 7816 industry standards for contact cards
- Supports contactless smart cards with up to 848 Kbps in the fastest ISO 14443 transmission mode
- Supports EMD suppression on contactless interface



SPECIFICATIONS

Base Model Number	OMNIKEY [®] 5421
HOST INTERFACE	
Host Interface	USB 2.0 (also compliant with USB 1.1)
Transmission Speed	12 Mbps (USB 2.0 full speed)
Connector Cable / Length	USB Type A Connector / 78.7" (200 cm)
CONTACT SMART CARD INTERFACE (CCID)	
Standards	ISO 7816 A/B/C
Protocols	T=0, T=1
Card Size	ID-1 (full-size)
Smart Card Interface Speed	420 Kbps (when supported by card)
Smart Card Clock Frequency	Up to 8 MHz
Supported Card Types	5V, 3V and 1.8V Smart Cards
Power to Smart Card	60 mA
Smart Card Detection	Movement detection with auto power-off / Automatic detection of smart card type/ Short circuit and thermal protection
8-Pin Handling	C4 / C8 supported
CONTACTLESS SMART CARD INTERFACE	
Standards & Protocols	ISO 14443 A/B with up to 848 kbps transmission rate (depending on card), ISO 15693 with up to 26 kbps transmission rate (depending on card), T=CL
Cards	HID iCLASS [®] ; MIFARE [™] Classic/Ultra-light/Plus/DESFire
HUMAN INTERFACE	
Status Indicator	Light Emitting Diode
DRIVER & SOFTWARE	
PC / SC Driver Support	Windows [®] XP/Vista/7/8 (32+64 bit) / Windows Server 2003/2008 (32+64 bit), 2008R2 (64 bit) / Windows CE 4.2/5/6/7 (depending on hardware) / Linux [®] and Mac [®] OS X
Supported APIs	PC/SC driver / CT-API (on top of PC/SC for contact interface) / OCF (on top of PC/SC, for contact interface)
CCID	Supported on contact interface including extended APDU
HOUSING	
Type	OMNIKEY Professional Line Desktop Design
Color	Cover grey / Body light grey
Composition	PC
Optional Accessories	Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)
Dimensions	2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)
Weight	Approx. 3.53 oz (100g)
Protection Rating	IP54 (dust / splashing water) (in preparation)
OPERATING CONDITIONS	
Power Supply	Bus powered
Operating Temperature	32° - 131° F (0° - 55° C)
Operating Humidity	10 - 90% Relative Humidity
Storage Temperature	-4° - 176° F (-20° - 80° C)
Durability	100,000 insertions
Meantime Between Failure(MTBF)	500,000 hours
CERTIFICATIONS & APPROVALS	
Compliance / Certification	CCID ¹ (contact interface only), Microsoft [®] WHQL ² , USB 2.0, TAA (on request)
Approvals / Environmental	RoHS 2, REACH, WEEE, UL, CE, FCC, ICES (Canada)
ORDERING INFORMATION	
Warranty	Two-year manufacturer's warranty. (For drivers, see complete lifetime support policy.)

1 = Chip Card Interface Device
2 = Windows[®] Hardware Quality Lab

Kimaldi Electronics S.L.

Crta. Rubí 292 B Pol. Ind. Can Guitard
08228 - Terrassa (Barcelona) Spain
Tel. +34937361510 - Fax. +34937361511
kimaldi@kimaldi.com

Kimaldi Lusa Lda.

Rua José Galvão, nº 1- B
2650 - 219 Amadora - Portugal
Tel. +351217156303 - Fax. +351217156295
portugal@kimaldi.com