





### 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

















## ASSA ABLOY

An ASSA ABLOY Group brand

© 2013 HID Global Corporation/ASSA ABLOY AB. All rights reserved. HID, HID Global, the HID Blue Brick logo, the Chain Design, OMNIKEY, ICLASS, ICLASS, MIFARE and MIFARE DESFire are trademarks or registered trademarks of HID Global or its licensor(s)/supplier(s) in the US and other countries and may not be used without permission. All other trademarks, service marks, and product or service names are trademarks or registered trademarks of their respective owners.

2013-10-29-omnikey-5421-reader-ds-en PLT-01751

North America: +1 949 732 2000 Toll Free: 1 800 237 7769

Europe, Middle East, Africa: +44 1440 714 850

Asia Pacific: +852 3160 9800 Latin America: +52 55 5081 1650

# **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)
	OCF (of top of FC/3C, for contact interface)
CCID	Supported on contact interface including extended APDU
CCID	
CCID	Supported on contact interface including extended APDU
	Supported on contact interface including extended APDU  HOUSING
Туре	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design
Type Color	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey
Type Color Composition	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape /
Type Color Composition Optional Accessories	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)
Type Color Composition Optional Accessories Dimensions	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)
Type Color Composition Optional Accessories Dimensions Weight	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)
Type Color Composition Optional Accessories Dimensions Weight	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)
Type Color Composition Optional Accessories Dimensions Weight Protection Rating	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS
Type Color Composition Optional Accessories Dimensions Weight Protection Rating	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered
Type Color Composition Optional Accessories Dimensions Weight Protection Rating Power Supply Operating Temperature	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered  32°-131° F (0° - 55° C)
Type Color Composition Optional Accessories Dimensions Weight Protection Rating Power Supply Operating Temperature Operating Humidity	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered  32°- 131° F (0° - 55° C)  10 - 90% Relative Humidity
Type Color Composition Optional Accessories Dimensions Weight Protection Rating Power Supply Operating Temperature Operating Humidity Storage Temperature	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered  32°-131° F (0°-55° C)  10 - 90% Relative Humidity  -4°-176° F (-20°-80° C)
Type Color Composition Optional Accessories Dimensions Weight Protection Rating Power Supply Operating Temperature Operating Humidity Storage Temperature Durability	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered  32°- 131° F (0° - 55° C)  10 - 90% Relative Humidity  -4° - 176° F (-20° - 80° C)  100,000 insertions
Type Color Composition Optional Accessories Dimensions Weight Protection Rating Power Supply Operating Temperature Operating Humidity Storage Temperature Durability	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered  32°-131° F (0° - 55° C)  10 - 90% Relative Humidity  -4° - 176° F (-20° - 80° C)  100.000 insertions  500,000 hours
Type Color Composition Optional Accessories Dimensions Weight Protection Rating Power Supply Operating Temperature Operating Humidity Storage Temperature Durability Meantime Between Failure(MTBF)	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered  32°-131° F (0° - 55° C)  10 - 90% Relative Humidity  -4° - 176° F (-20° - 80° C)  100,000 insertions  500,000 hours  CERTIFICATIONS & APPROVALS  CCID¹ (contact interface only), Microsoft* WHQL², USB 2.0, TAA (on request)
Type Color Composition Optional Accessories Dimensions Weight Protection Rating Power Supply Operating Temperature Operating Humidity Storage Temperature Durability Meantime Between Failure(MTBF)	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered  32°- 131° F (0° - 55° C)  10 - 90% Relative Humidity  -4° - 176° F (-20° - 80° C)  100,000 insertions  500,000 hours  CERTIFICATIONS & APPROVALS  CCID¹ (contact interface only), Microsoft* WHQL², USB 2.0, TAA (on request)  RoHS 2, REACH, WEEE, UL, CE, FCC, ICES (Canada)
Type Color Composition Optional Accessories Dimensions Weight Protection Rating Power Supply Operating Temperature Operating Humidity Storage Temperature Durability Meantime Between Failure(MTBF)	Supported on contact interface including extended APDU  HOUSING  OMNIKEY Professional Line Desktop Design  Cover grey / Body light grey  PC  Removable Card Holder for card-present operation / Mounting Jacket & Adhesive Tape / Vertical Standing Base (in preparation)  2.79" x 3.66" x 0.63" (71 mm x 93 mm x 16 mm)  Approx.3.53 oz (100g)  IP54 (dust / splashing water) (in preparation)  OPERATING CONDITIONS  Bus powered  32°-131° F (0° - 55° C)  10 - 90% Relative Humidity  -4° - 176° F (-20° - 80° C)  100,000 insertions  500,000 hours  CERTIFICATIONS & APPROVALS  CCID¹ (contact interface only), Microsoft* WHQL², USB 2.0, TAA (on request)

1 = Chip Card Interface Device

2 = Windows\* Hardware Quality Lab