Frequently Asked Questions (FAQ)

Which contactless cards support the OMNIKEY 5321 v2?
The OMNIKEY 5321 v2 support all contactless cards, Passports and e-ID cards compliant to ISO 14443 A/B and ISO 15693 standard. Furthermore it can read write to NXP® MiFare® cards including MiFare Plus, MiFare Desfire® and HID iCLASS. ISO 15693 tags like Infineon® my-D®, NXP iCode® and TI Tag-It® are also supported.

Which contact cards support the OMNIKEY 5321 v2?
Virtually any kind of ISO 7816 compliant full size (ID-1) smartcard is supported in the contact slot. The protocols T=0, T=1 and extended APDU support are standard. The memory card protocols I²C, 2-wire and 3-wire are also supported.

What is the difference between OMNIKEY 5321 v2 and v1?
The OMNIKEY 5321 v2 has an improved antenna for a better coupling between reader and card. With the v2 we also introduce the first time the EMD suppression functionality, which allows us to operate cards and passport equipped with this security feature.

Does OMNIKEY 5321 support contactless PKI?
Yes, with its optimized antenna for all ISO 14443 A+B compliant cards and tokens the power transmission into the card is strong enough to sustain the long and power consuming process of generating of and calculating with RSA or other asymmetric cryptography keys.

What is the EMD suppression feature of the OMNIKEY 5321 v2?
A: New generations of Passports and e-ID documents and a lot of new contactless cards protect the communications between card and reader through white noise generation against spoofing or other attack mechanisms. With the EMD suppression feature this white noise can be detected by the reader and filtered to have a quick and reliable communication between card and reader.

Why is EMD suppression important for a contactless reader?
The upcoming trend on the market shows that nearly all of the cards have an increased noise during operation and EMD suppression handles this for a better, quicker and reliable communication to the card.

I have problems using the contact interface on a dual interface card, because the contactless interface is always recognized first by the application. How can I get access to the contact interface?
The OMNIKEY 5321 reader family supports commands to disable the contactless interface temporarily. Please look into the Contactless Developers Guide on our webpage or write an email to our technical support to get the commands explained.

Is an SDK for the OMNIKEY 5321 v2 available?
Developer documentation is available for free download on the HID Global web server. http://www.hidglobal.com/OMNIKEY
Please click on the Application Note icon to download the PDF.
For programmers, free application sample code is also available for free download. Please click on the "OMNIKEY Driver Downloads" link to get to the download section, where you can find the "Synchronous-API" after extracting and installing this API you can find the code samples in the default directory C:\OMNIKEY and it's subdirectories or in the directory chosen during installation. Please install the PC/SC driver before installing the Synchronous-API.

Which APIs are supported by the OMNIKEY 5321 v2?
The driver for the OMNIKEY 5321 v2 is fully PC/SC 2.01 compliant. You can find all documentation regarding this API on http://www.pcscworkgroup.com . This PC/SC Command set is also supported by the SCardControl commands of Microsoft® VisualC/C++ and VisualBasic development package.
For accessing the tags supporting command sets not supported by PC/SC you can use the "Synchronous-API".

Is the OMNIKEY 5321 v2 capable of reading electronic passports?
The OMNIKEY 5321 v2 can generally read ICAO compliant passports. Please make sure that you have the BAC (Basic Access Control) or EAC (Extended Access Control) security requirements fulfilled.

Is the OMNIKEY 5321 v2 capable of operating payment cards?
Yes, the OMNIKEY 5321 can read EMVCo CL 2.0 compliant contactless or EMVCo 2000 compliant contact cards, but the device is not certified for these standards. If you require a certified device, please ask for the OMNIKEY 5321 PAY. The EMVCo mode can be toggled by the application.

Is the OMNIKEY 5321 v2 supported by a Linux driver?
Currently there is no Linux support for the 5321 v2. A Linux version is planned to be released end of Q1 / 2010.

Is the OMNIKEY 5321 v2 also supported on mobile platforms?
Yes, the OMNIKEY 5321 is supported on Windows Mobile 6.0, 6.5 and CE 5.0 for x86, ARM and MIPS processors. Please send a mail to HID technical support with the OS and CPU version to get the driver for your platform.

Does the OMNIKEY 5321 v2 support HID iCLASS technology?
Yes, the OMNIKEY 5321 v2 supports the HID iCLASS technology.
The OMNIKEY 5321 V2 is capable of both Read Only and Read/Write to HID iCLASS card functions. Please see the Application Note "Contactless Developers Guide" for further detail. This application note is free for download on the HID Global website http://www.hidglobal.com/omnikey.

Does the OMNIKEY 5321 v2 support HID iCLASS Elite technology?
The OMNIKEY 5321 v2 is prepared for supporting iCLASS Elite technology usage. Customized devices supporting this enhanced security technology fully are planned for Q2/2010.

Does the OMNIKEY 5321 v2 support HID Prox or other 125kHz technologies?
HID Prox or other 125KHz technologies are not supported on this 13.56MHz reader family.