Drivers and Manuals: www.hidglobal.com/omnikey

OMNIKEY®
Smart Card Readers
Installation Guide

PLT-02395, Rev A.3

eBase Models
1021, 3021, 3121, 5021, 5022, 5023,
5025, 5027, 5127, 5421, 5422, 5427, 6121

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Introduction

This guide describes physical behaviour and conformities of OMNIKEY Smart Card Readers.

1021 USB - Desktop smart card reader in a small form factor for desktop and mobile usage.

3021 USB - High-performance smart card reader, with a USB interface and small form factor for desktop and mobile usage.

3121 USB - High-performance smart card reader for desktop use with multiple standing base options in a robust housing.

5021 USB - Contactless Reader with USB interface for desktop use that reads/writes to 13.56 MHz smart cards.

5022 USB - Contactless Reader with USB CCID-compliant interface for desktop use that reads/writes to 13.56 MHz smart cards.

5023 USB - A 5022 Reader with iCLASS and Seos support.

5027 USB - A 5023 Reader with Keyboard wedge.

5025 CL USB - Contactless Reader with USB CCID-compliant interface for desktop use that reads contactless (125 kHz) Prox cards.

5127 / 5427 CK/ 5427 UE USB - Contactless 13.56MHz/125kHz reader with CCID/Keyboard wedge interface.

5427 G2 - Contactless 13.56MHz/125kHz reader with CCID/ Keyboard wedge interface and BLE.

5421 / 5422 USB - Dual interface PC-linked reader that reads/ writes to 13.56 MHz contactless cards and virtually any contact smart card. 5422 includes CCID.

6121 Mobile USB - Dongle-sized smart card reader for SIM-sized smart cards, especially well suited for use with mobile devices.

Parts

- Smart Card Reader
- Installation Guide

Find drivers, reader documentation supporting various operating systems at:
www.hidglobal.com/omnikey

See the application note for card loading and handling instructions at: www.hidglobal.com/omnikey

Specifications and Installation

For further information, contact HID support:
www.hidglobal.com/support

For driver setup, consult the OMNIKEY Smart Card User Guide.

CAUTION: Install the drivers prior to attaching the OMNIKEY reader with the computer.

ATTENTON: Vous devez installer le driver avant de connecter le lecteur OMNIKEY à l'ordinateur.

USB Connected Reader Specifications

Operating Temperature	32°F to 131°F (0°C to 55°C)
PC Connector Cable	**59.1 in (150 cm)** 1021, 3021, 3121, 5021, 5022, 5023, 5025 CL, 5027, 5422, 5427 G2 **78.7 in (200 cm)** 5421, 5427 CK
Mean Time Between Failures (MTBF)	500,000 Hours
Host Interface	USB 2.0 CCID (USB 1.1 Compatible)
Host Data Transmission Speed	12 Mbps (USB 2.0 Full Speed)
Power Supply	Bus Powered

USB Connected Reader Installation

1. Connect the reader with computer; plug the USB connector into your computer's USB port.
2. When the reader is operational, the LED illuminates.
3. For contactless operation, hold the card next to the reader logo. For contact smart cards, insert the card into the reader with contacts facing up.
4. The LED blinks when the reader is exchanging data with a card (reading/writing).

Regulatory

CAUTION: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

ATTENTION: Tout changement ou modification de cet appareil sans approbation explicite du manufacturer vous enlève les droits d'usage de cet équipement.

FCC (All Readers)
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC (Readers 1021, 3021, 3121, 6121)
Tested to comply with FCC standards FOR HOME AND OFFICE USE

Product Radio Certifications

The OMNIKEY 5022 CL and 5127CK MINI Module were tested under the FCC rules and Industry Canada rules for a Modular Approval and therefore the following shall apply: (reference below FCC/IC IDs)

- Provided that the Antenna and tuning network have not been changed in any way, the Final Product label may contain the HIID Global FCC ID. Provided no other radio devices exist within the final assembly. The end integrator may use these ID's, as long at the original HID Global Label is visible.
- FCC ID: JQ6-OK5022CL or IC ID: 2236B-OK5022CL
- FCC ID: JQ6-OK5127CKMINI or IC ID: 2236B-OK5127CKMINI
- The End User/Manufacturer, will not need to repeat the intentional emissions testing (actual radio certification), however the un-intentional emissions testing will need to meet the FCC and IC requirements with the module installed into the final assembly or product. This also applies to CE Marking as defined by the R&TTE Directive.
- However, in many cases, the module may need to be retuned, due to the effects of the product enclosure and assemblies within this enclosure, and the de-tuning affect that this may have on the radio circuitry. In this case and if other radios exist, Class 2 Permissive Change is required.
- In the event that the HID OEM modules Kit is modified in any way, the radio transmitter operating at either 125 kHz, 13.56 MHz and Bluetooth, when the module is integrated into the OEM's final product, Radio Certification is required for the final product.
- Obtain FCC Certification by submitting the final product to a Telecommunications Certified Body (TCB) laboratory that performs the testing and issue the FCC Grant. Standard: Part 15, Subpart C.
- Often the same TCB tests to Canada requirements and grants certification as a Certification Body (CB). Standard: RSS-210, RSS-GEN and RSS-310, where applicable.
- The same laboratory may also be an EU Communications Assessment Body (CAB) that is accredited to test to R&TTE Directive requirements for CE Marking. Applicable standards:
  EN 300 330, EN 301 489-3, EN 50130-4, and IEC60950.
- A laboratory that is a CAB testing to R&TTE Directive requirements will also be testing to Australia and New Zealand requirements because of a common test standard. Standard:
  AS/NZS 4268.
- Asian country certifications are obtained on an individual country basis.

OEM Final Product US Dept. of Commerce Bureau of Industry and Security (BIS) approval is required for USA based companies who export and re-export products using encryption.

Regulatory Compliance Assistance - HID Global provides technical assistance and laboratory recommendations, as required.

CAUTION: Any changes or modifications to this devise not explicitly approved by the manufacturer could void your authority to operate this equipment.

Canada Radio Certification (All Readers)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicable aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

CE Marking (All Readers)

HID Global hereby declares that these proximity readers are in compliance with the essential requirements and other relevant provisions of Directive 2006/95/EC.

Por el presente, HID Global declara que estos lectores de proximidad cumplen con los requisitos esenciales y otras disposiciones relevantes de la Directiva 2006/95/EC.

HID Global déclare par la présente que ces lecteurs à proximité sont conformes aux exigences essentielles et aux autres stipulations pertinentes de la Directive 2006/95/EC.

A HID Global, por meio deste, declara que estes leitores de proximidade estão em conformidade com as exigências essenciais e outras condições da diretiva 2006/95/EC.

HID Global bestätigt hiermit, dass die Leser die wesentlichen Anforderungen und anderen relevanten Bestimmungen der Richtlinie 2006/95/EC erfüllen.

HID Global dichiara che i lettori di prossimità sono conformi ai requisiti essenziali e ad altre misure rilevanti come previsto dalla Direttiva europea 2006/95/EC.

Download the R&TTE Declaration of Conformity (DoC) at:
http://www.hidglobal.com/certifications

Brazil (Readers 5022, 5023, 5422 and 5427 G2)

"Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário"

Chile (Readers 5022, 5422 and 5427 G2)

China (Readers 1021, 5022, 5422, 5427 and 5427 G2)

Hong Kong (Readers 5022, 5023, 5422 and 5427 G2)

India (Readers 5022, 5023, 5422 and 5427 G2)

Japan MIC (Reader 4121)

この装置は総務省の型式指定を受けています。
本製品は電波を使用したRFID機器の読み取り・書き込み装置です。
そのため使用する用途・場所によっては、医療機器に影響を与える恐れがあります。

Korean KC (Readers 1021, 3121, 4040, 4321, 5021, 5022, 5325, 5326, 5421, 5422, 5427, 5427 G2, 6121, 6221, 6321)

이 기기는 가정용(B급)으로 전자파 적합 등록을 한 기기 로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

항목	규격	항목	규격
송신주파수	RFID:13.56 MHz	전파형식	A1D
수신주파수	RFID:13.56 MHz	발진방식	X-tal
출력	RFID: 10m에서 24.19mv이하	변조방식	AM
전원	DC 5		

Mexico (Readers 5022, 5023, 5422, 5427 G2)

Singapore (Reader 5427 CK)

Complies with
IDA Standards
DA103548

Taiwan (Readers 5321 and 5421)

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功
率或變更原設計之特性及功能。低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現
有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作
業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干
擾。

According to "Administrative Regulations on Low Power Radio Waves Radiated Devices" Without permission granted by the NCC, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to an approved low power radio-frequency devices shall not influence aircraft security and interfere legal communications; If found, the user shall cease operating immediately until no interference is achieved. The said legal communications means radio communications is operated in compliance with the Telecommunications Act.

The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.