

**suprema** ID

# RealPass-N

**Compact Full-page Document Reader**

## **User Manual**



# INTRODUCTION

## 1. RealPass-N

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RealPass-N is a compact, full-page and multi-functional document reader for one-step reading of multiple document types including ICAO standard documents such as e-Passport, e-Visa, ID cards and 1D & 2D barcodes. It is designed to capture or extract data from visual data page and RFID chip of electronic documents quickly and reliably in a variety of public and commercial sectors. By design and performance innovation, it provides 500DPI high resolution, USB 2.0 high speed, tempered glass with IP54 surface and Anti-glare technology to capture image and data in multiple illuminations (White, IR, UV). RealPass-N is an ideal and ergonomic form factor with low profile and simple shape for space-saving and easy integration in self-service kiosks, e-gates and counters.

## 2. Features

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- Compact, full-page and multi-functional document reader
- One-step reading of visual data page and RFID chip of e-documents
- ICAO Doc 9303 Standard Compliance
- 500DPI high resolution (Configurable), 24bit true color image
- OCR data capture of the Machine Readable Zone (MRZ)
- Reads ISO14443 Type A/B contactless chip, 1D/2D Barcodes
- Multiple illumination (White, IR and UV)
- Hoodless Operation in various environments
- Anti-Glare Technology to capture high quality images
- Automatic document placement detection
- Smart power consumption is automatically activated once PC turned off
- Multi-color LED and beep sound for intuitive user interface
- USB 2.0 high speed interface
- Integrated USB 3.0 Hub – 2 ports for external peripheral device
- No moving parts, robust, minimal maintenance cost
- Rugged form factor with tempered glass and IP54 surface
- Low profile, simple shape for space-saving and easy integration
- Kensington® Security Lock, SAM Slot
- Provides SDK for easy integration into any systems

### 3. Application

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- Border Control & Immigration Service
- Airport/Port Security Service
- Law Enforcement
- Bank & Insurance & Mobile Operators
- Hotels/Car Rental/Casinos/Duty-Free shop
- Travel Agencies/Airline Check-in
- Document & Visa Issuance
- Self-Service Kiosks & e-Gates

# FEATURES AND SPECIFICATIONS

## 1. Specifications

### 1.1. Specifications

Dimension (WxDxH, mm)	155 x 190 x 99.8 (103.8w/ Guide)
Active Windows Size (HxV, mm)	130 x 90
Weight (kg)	1.01
Image Resolution (DPI)	500(Configurable), 5M Pixel Sensor
Image Color Depth	24 bits / pixels
Illuminations	White/Visible, IR, UV(UVA)
Contactless RFID Reading	ISO 14443 A/B Type (up to 848Kbps) including BAC, PA, AA, EAC, PACE and SAC, PC/SC support
Barcode Reading	1D: Code 11, 39, 39 Extended, 93,128 / UCC 128 / 2 of 5 Interleaved / EAN 8, 13 / UPC A, E / Add 2, 5 2D: PDF417, Data Matrix, QR Code, Micro QR Code
Image Formats	BMP, PNG, JPEG
Image Sensor	5M Pixel
Processing Time	Image Capture(HW, IR, UV) and MRZ reading < 2 sec.
Indicator	Multi-Color LED, Navigation LED, Beep(Programmable)
Operating Temperature	-20°C ~ 55°C
Operating Humidity	0 to 95% (non-condensing)
IP rate	IPX0(surface), Tempered glass(scratch free)
Power Supply	USB (5V, 700mA) or External Power (DC12V, 1000mA)
Interface	USB 2.0 high speed, Integrated USB 3.0 Hub – 2 ports for external peripheral device
Communication Protocol	ISO 14443 Type A/B(ISO7816), PCSC Interface
Recommend Hardware	2GHz Pentium® 4 CPU (Intel Core 2 Duo), 1GB DRAM or above
Operating Systems	Windows 10, 8, 7(32/64bit), Linux Ubuntu and CentOS LTS(32/64bit)
Software	SDK including DLLs with demo programs in multiple programming languages, F/W Upgrade via USB interface
Certificates	KC, CE, FCC, CB, WEEE, RoHS, Reach

\*\*\* This equipment shall be supplied by LPS (Limited Power Source)

Operating Frequency : 13.56 MHz

Modulation : ASK

Channel : 1 ch

Maximum target power

FCC : 44.78 dBuV/m

CE : 8.20 dBuA/m

## 1.2 Device Configuration & Components



RealPass-N



USB Cable

### FCC compliance information

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.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**FCC Caution** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**FCC Radiation Exposure Statement (Part 2.1091)** This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### EU Declaration of Conformity (CE)

This product is CE marked according to the provisions of the Radio Equipment Directive (RED) 2014/53/EU. Hereby, Suprema Inc. declares that this product is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive (RED) 2014/53/EU.

For more information, contact us at the following contact information.

Suprema Inc.

Website: <https://www.suprema-id.com>

## 2. Exterior

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### 2.1. Top View



#### 2.1.1. Indication LED

##### 1) OCR

- Green: Lights when OCR reading is succeeded
- Red: Lights when OCR reading failed
- Blue: Lights when OCR is operating

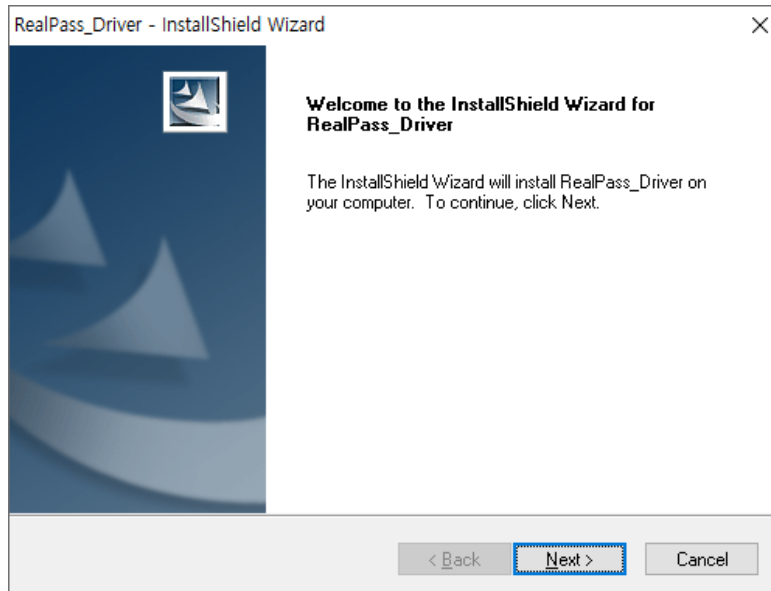
##### 2) PWR (Power)

- Red: Lights when the device is supplied with power source
- Green: Lights when the device is connected to RealPass SDK application

### 3. Device Driver Installation

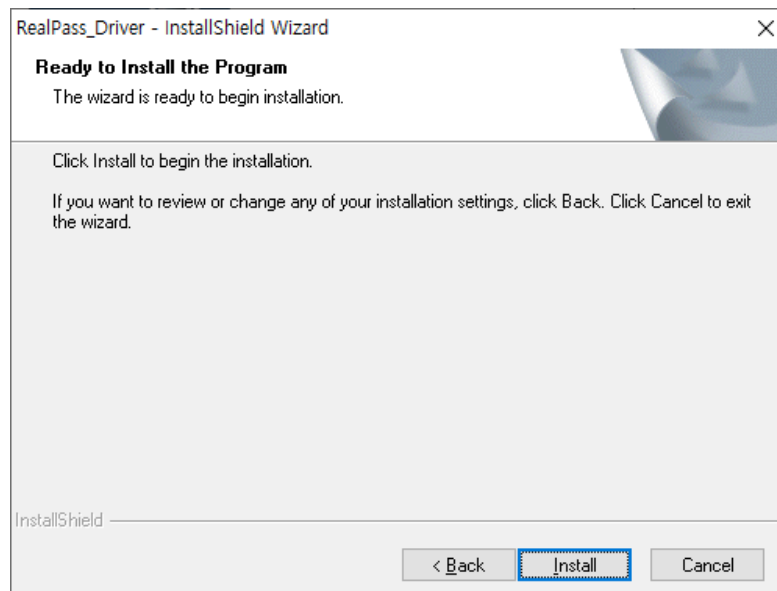
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- 3.1. Disconnect USB cable to PC before starting the driver installation.
- 3.2. Double-Click & run "ReaPass\_DeviceDriver(Win7 or Win 10). exe" as administrator.

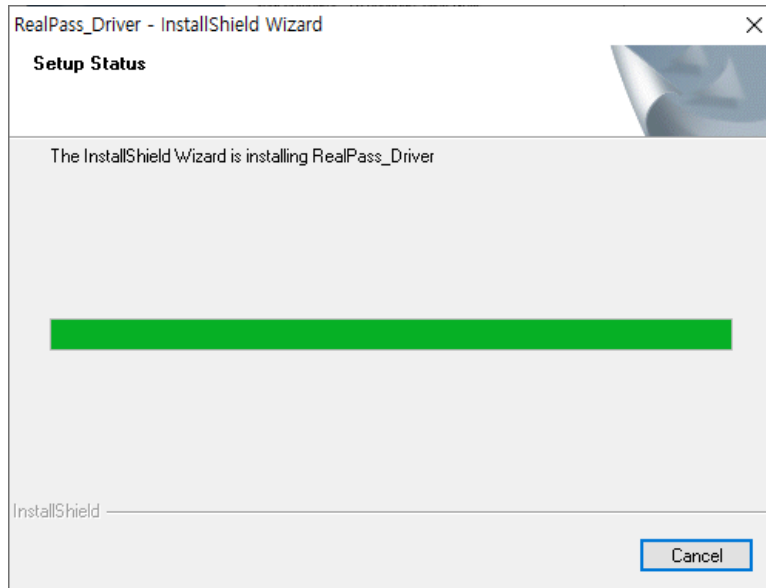


1<sup>st</sup> Step of Installation

- 3.3. The driver installation starts

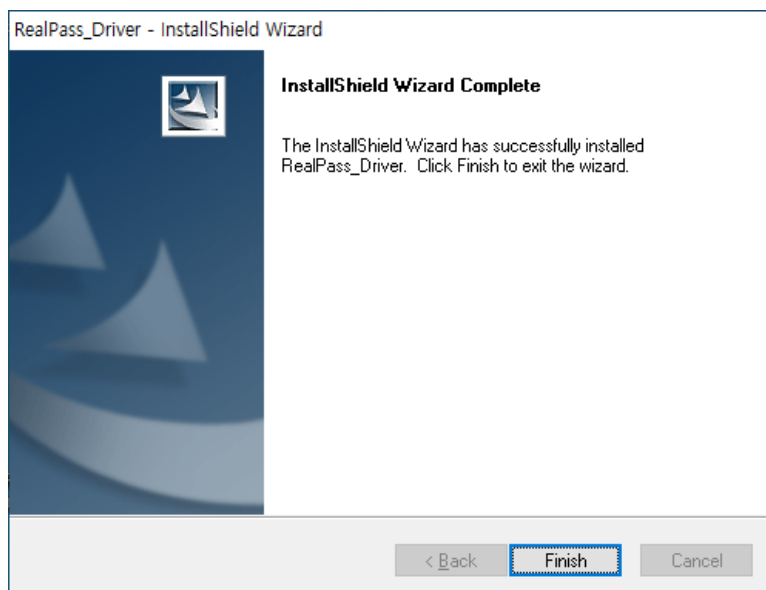


2nd Step of Installation



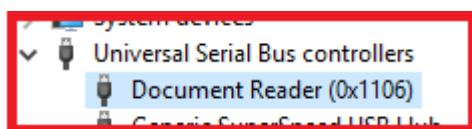
3rd Step of Installation

3.4. Click "Finish" to exit the driver installation program.



4th Step of Installation


3.5. Connect USB cable to PC, and check status in Device Manager.





























## 4. Run RealPass-N with RealPassExample\_VC.exe

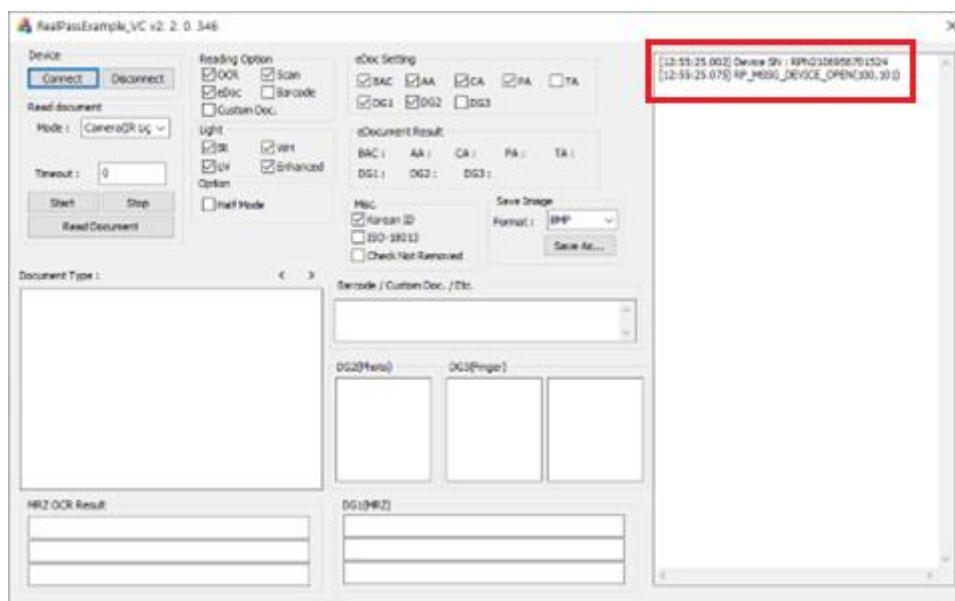
4.1. Go to the directory which is located 'RealPassSDK' and then go to the 'bin'.

 C:\Program Files (x86)\Suprema ID\RealPassSDK\Bin\Win64

4.2. Run 'RealPassExample\_VC.exe'

	cert	2022-08-31 오후 12:37
	data	2022-08-31 오후 12:37
	html	2022-08-31 오후 12:37
	AgentCtrl.exe	2022-07-26 오후 3:41
	BarcodeReaderLib.dll	2022-07-06 오후 7:47
	DocumentReaderLib_N.dll	2022-07-25 오후 5:43
	DTKBarReader.dll	2022-07-06 오후 7:47
	ePassportAPI.dll	2022-07-06 오후 7:47
	ePassportAPI_CSDK.dll	2022-07-06 오후 7:47
	ePassportCrypto.dll	2022-07-06 오후 7:47
	ePassportSPKI.dll	2022-07-06 오후 7:47
	ePassportLogger.dll	2022-07-06 오후 7:47
	ePassportReader.dll	2022-07-06 오후 7:47
	libeay32.dll	2022-07-06 오후 7:47
	opencv_world343.dll	2022-07-06 오후 7:47
	RealPass_WebAgent.exe	2022-07-26 오후 3:41
	RealPassBarcode.json	2022-07-06 오후 7:47
	RealPassExample_CSharp.exe	2022-07-26 오후 3:42
	RealPassExample_VC.exe	2022-07-26 오후 3:40
	RealPassSDK.dll	2022-07-26 오후 3:40
	RealPassSDK.json	2022-07-06 오후 7:47
	server.ini	2022-07-06 오후 7:47
	ssleay32.dll	2022-07-06 오후 7:47
	Suprema.RealPassSDK.dll	2022-07-26 오후 3:42

4.3. Click 'Connect' button. (If you can hear beep sound, 'RealPassExample\_VC.exe' connects RealPass-N automatically.)



4.4. Place any passport on the platen, and then click 'Start' button.

(\* Private information is deleted.)