# **Fingerprint Scanner RealScan-S**





### Outline

A fingerprint scanner used by the police or prosecution for collecting a suspect's rolled fingerprints or acquiring a person's flat fingerprints for identification. Capable of collecting high quality fingerprint images due to its cutting-edge optical technology.

The data of collected fingerprint images are transferred through a high speed USB 2.0 interface.

#### **Features**

#### Perfect Image Acquisition of Rolled Fingerprints

In case of the whorl as fingerprint classification, the input window is enough large to catch deltas on the left or right side of a fingerprint.

#### Acquisition of High Quality Fingerprint Images

Capable of collecting high quality fingerprint images in any situation where there is stain over the prism, and fingerprint is wet because special optical assembly is adopted by using a high resolution camera and a multi-structured lens.

#### · Ease of Use

Capable of collecting the left or right side image of a fingerprint. Easy to catch a fingerprint image in a place away from a PC because of the attached input switch.

#### Multi-Functions

In addition to functions of leading to the center of a fingerprint and checking automatically its quality (A, B, C), special functions can be built up for customers' convenience.

#### Strong Durability

Durable under the weight of 75kg. As a waterproof device, working in any condition that could happen in the police station. Irrelevant to external temperature change by preventing water condensation (option).

## API (Application Program Interface) Support

Various functions are provided to interlock easily with a user's application program.

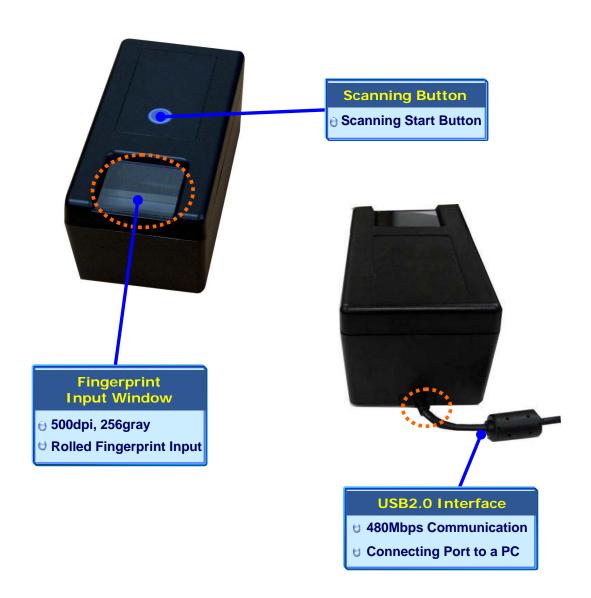


# **Device Composition**

RealScan-S<sup>TM</sup> consists of a fingerprint input window. Its power is supplied by the USB port. USB 2.0 as interface is connected to a PC.

Instead of the PC, a button on the body is used at the beginning stage of input.

A related program is an API to interlock with device drivers and application programs.



<sup>\*</sup> Body design can be different by upgrade.



# **Cutting-edge Optical Technology**

Designed by the special optical structure to catch high-quality fingerprint images not only from a normal state, but also from any state, i.e. wet fingers, mark or oil stain left over the prism, etc.

Ridges and valleys on a fingerprint are clearly distinguished without any blurred image in a situation where the fingerprint is soaked.

Recognition rate for the acquisition of high-quality fingerprint images increases because dirt or oil stain of fingerprints is automatically removed off the input window.

# Easy Fingerprint Collection

In case of a rolled fingerprint collection, the center of the print is marked by overlaying "+" in the middle of the monitor. So, a user can get the print from the exact position.

According to features of fingerprints, images are naturally rotated in a direction (or reverse direction) to make it possible to capture a high-quality fingerprint image.



Lead to the Center

## **Automatic Quality Check**

Scanned images for rolled fingerprint are classified into the level of A, B, and C by the algorithm of checking qualities. For the image of level C, re-collection sign is suggested. If the order of rolled fingerprints is changed, a notice is also automatically suggested.

Abnormal images of fingerprints return various error codes by analyzing the images. Therefore, normal images are always captured.

# Durability

Unlike a semiconductor or variant semiconductor which has a flaw that input windows or silicon pads should often be replaced due to the scratch of windows, the durability of the input window is very strong because the material is made in an optical way.

It is also easy to install between PCs by using a USB 2.0 interface.



# **Key Functions**

• For customers' convenience, RealScan-S is possible to build up additionally needed functions to the below basic functions.

- 500dpi, 256gray
- Capable of input for wet fingerprints

High Quality Fingerprint Image Acquisition

**Various Functions** 

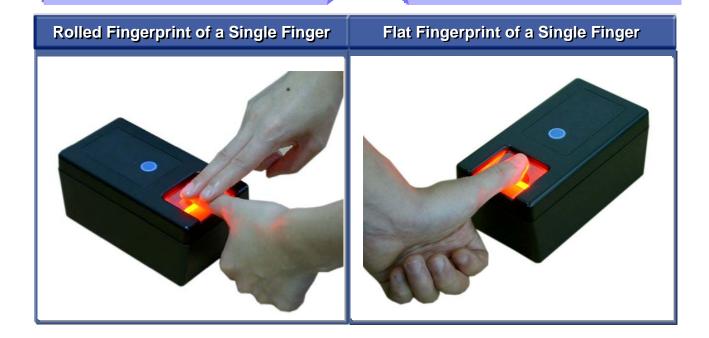
- Automatic Quality Check (A,B,C)
- Automatic Check for Fingerprint Input State

- Real-time Fingerprint Image
- Left or Right Side Input by Rotation
- Overlaid Mark about the Center
- OK Button for Input

Convenience

**Others** 

- Various Error Return Value
- Various Function Supply to interlock with Application Programs





# Specifications

**Dimension** W (80mm) x L (165mm) x H (75mm)

**Body Material** Plastic

Input Window Rolled or Flat Fingerprint Input Window for a

**Single Finger** 

Resolution 500dpi, 256gray

Illumination Red Chip LED

Scanning Image Size 600 x 600 Pixels

Input Window Size 44mm x 40mm

Scanning Speed Rolled Fingerprint - Less than 5 secs.

Flat Fingerprint – Less than 1 sec.

Interface USB 2.0

Power USB Port Power

Operating Temperature 0°C ~ 40°C

OS Window 2000, XP

PC Over Pentium 4 2,0 GHZ

- Specifications can be changed with upgrade.
- Fingerprint Algorithm and SDK are optional.

