

User Manual



General Description

The FP1031 is a robust, secure USB fingerprint pod. It contains a Validity VFS301 durable fingerprint sensor which consists of custom silicon chip bonded to a Kapton® plastic flex circuit, known as Chip-On-Flex (COF). The sensor captures the unique features of a 3-D fingerprint image using a patented technique to detect and measure the ridges and valleys of a live finger. The FP1031 is USB 1.1 and 2.0 full-speed capable and one of the most durable high performance fingerprint sensor devices on the market today.

Feature

Superior Durability

- Fingerprint sensing area and silicon die are separated
- Finger touches a durable Kapton® plastic surface, not silicon
- High resistance to Electrostatic Discharge (ESD), abrasion, liquids, and chemicals
- Industry leading resistance to impact damage

High Quality Imaging

- High Frequency RF transceiver acquires stronger signal from finger, penetrating deep into live tissue
- Best images provide Best False Accept Rate (FAR) / False Reject Rate (FRR) performance

Improved Usability & Ergonomics

- Users swipe their finger over a durable plastic surface to acquire fingerprint
- Navigation and scrolling modes are available
- Bi-directional swiping supported
- USB remote wakeup supported

Flexible Product Options

- Small footprint with flexible z-height options
- Variety of reference designs available
- Multiple standard module options available

Extensive Software Support

- Compatible with the industry's leading biometric security software applications
- Pre-Boot Authentication (PBA)
- Single-Sign-On (SSO) solutions also available

Hardware Specification

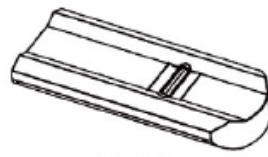
Feature	Specification
Interfaces	USB 1.1 / 2.0 Full Speed, Mini B connector
Certifications	CE mark, FCC class B
Pod Dimensions	67mm (L) x 29mm (W) x 11mm (H)
Power Requirements	Fully compliant with USB 2.0 specification for operating and standby power modes.
Image Capture Size	200 pixel wide fingerprint image (10mm) at 508 DPI
Sensor Opening	12mm x 3mm
Imaging	<ul style="list-style-type: none"> ■ 508 DPI resolution, 256 levels of grayscale ■ 10 bit analog imaging for greater dynamic range
Durability	Sensor resistance to scratch, abrasion, chemicals, and impact <ul style="list-style-type: none"> ■ Scratch: ISO15184, 6H Pencil Lead Hardness ■ Impact: 3M pen drop ■ Abrasion: >10 million swipes
ESD Resistance	IEC 61000-4-2 Level 4B (+/- 15kV air, ± 8kV Indirect Contact)
Materials Compliance	RoHS compliant (lead free)
Operating Temperature	-10 to +70°C
Storage Temperature	-30 to +85°C

Software Specification

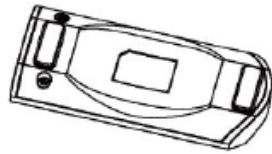
Feature	Specification
Supported Operating System	Windows Vista / XP / 2000
Supported Software Applications	<ul style="list-style-type: none"> ■ Compatible with the industry's leading biometric security software applications: <ul style="list-style-type: none"> ■ Bioscrypt Verisoft ■ Cogent Systems BioTrust ■ Digital Persona Personal ■ Digital Persona Pro ■ Softex OmniPass ■ Pre-Boot Authentication (PBA) ■ Single-Sign-On (SSO) solutions also available
Image Reconstruction Technology	<ul style="list-style-type: none"> ■ Licensed and protected dual-line-image reconstruction from Cogent Systems
Fingerprint Matching Technology	<ul style="list-style-type: none"> ■ Validity software license includes a patented fingerprint matcher from Cogent Systems ■ Open system architecture allows sensor to support any 3rd party matcher

Mechanical Parameters

Nominal size – 67mm (W) x 29mm (L) x 11mm (H)



TOP VIEW



BOTTOM VIEW

Figure 2 – FP1031 Fingerprint Pod

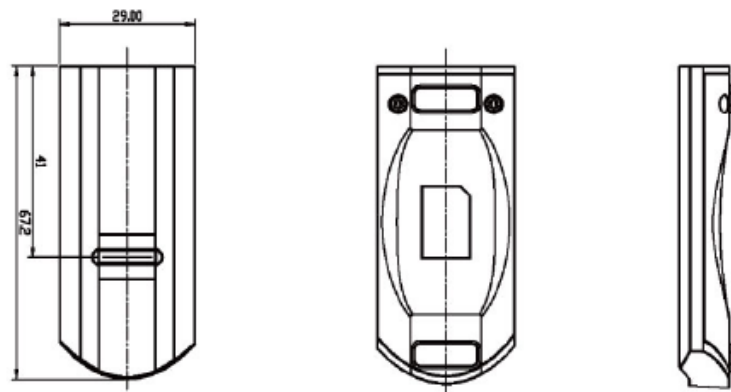


Figure 3 - Top View, Bottom View and Side View



Figure 4 - Front View

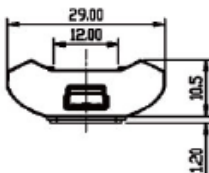


Figure 5 - Rear View

Packing Specification

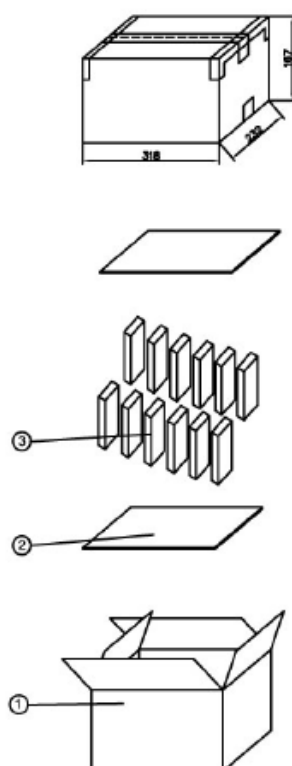
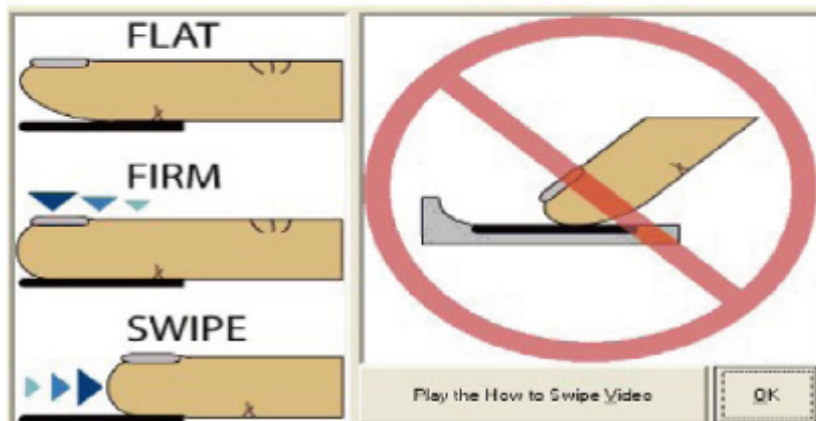


Figure 6 – Packing explosion diagram

Fingerprint scanning procedure:

- Put fingertip on top of the finger guide on plastics.
- Swipe finger in a smooth motion (2-20cm per second),
- Angle of swipe should not be more than 10 degree.

**FCC requirement:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

FCC ID: ZWQFP1031

This device can be expected to comply with part 15 of the FCC Rules provided it is assembled in exact accordance with the instructions provided with this kit. Operation is subject to the following 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.