

# M2-Hamster™ Plus

## Optical Fingerprint Reader



The **M2-Hamster™ Plus** is made with the industry's most rugged and advanced optical sensors to give you the highest quality in fingerprint biometrics

### M2-Hamster™ Plus

An ultra-fast, high performance and versatile fingerprint reader with Auto-On™ & Smart Capture™

### Features

- High-quality, rugged, maintenance-free optical fingerprint sensor with ultra-precise 500 DPI resolution
- Auto-On automatically turns on sensor when it detects a finger
- Smart Capture ensures quality fingerprint scanning of difficult fingers
- Hardened fingerprint contact area that is resistant to scratches, impact, corrosion and electrostatic discharge (ESD)
- Compact and ergonomically designed to work with any finger or thumb
- Integrated finger guide
- Removable, weighted stand
- USB connection



### What is Auto-On™?

Auto-On is a feature that allows the M2 Hamster™ Plus to automatically detect the presence of a finger when placed on the reader. With Auto-On enabled, you can quickly and easily identify yourself, making fingerprint biometrics even more convenient.

### What is Smart Capture™?

Smart Capture automatically adjusts the brightness of the sensor, allowing it to capture high quality fingerprints from a greater spectrum of traditionally difficult fingers ranging from dry to moist.

## M2-Hamster™ Plus: Known for High Quality

### Durable

The M2-Hamster™ Plus features a virtually indestructible sensor prism. From the sensor surface to the internal lens and electronic components, the sensor was designed to be strong and dependable to deliver consistent performance in indoor,

### Accurate

The M2-Hamster™ Plus produces very high accuracy rates. An innovative optic design yields distortion-free images from which data points are used for matching. High quality images mean greater precision, less false rejection and acceptance, and better overall performance.

### Maintenance-free

Unlike semiconductor-based sensors and other optical sensors in the market, the M2-Hamster™ Plus sensor is made with a hard quartz-like material that resists scratches, shock, corrosion and other stress. There are no coatings to maintain or disturb. Additionally, the optic parts are tightly assembled so that if the reader is ever dropped, there is no need for re-calibration.

### Cost-effective

The M2-Hamster™ Plus is built to last, thus eliminating costly replacements. Additionally, the reader comes with a two-year warranty, one of the best in the industry.



# Specifications

## General

Dimensions (W x L X H)	26 x 40 x 72 mm (without stand)
Weight	100g (without stand)
Operating Temperature	0° to 40° C
Operating Humidity	< 90% RH, noncondensing
Cable Length	1800 mm
Certification/Compliance	FCC, CE, RoHS

## Optical

Sensor	FDU03FRS™
Image Resolution	500 DPI ± 0.2%
Image Size	260 x 300 pixels
Platen Size	16.1 mm x 18.2 mm
Effective Sensing Area	12.7 mm x 14.9 mm
Image Grayscale	256 shades (8-bit gray level)
Image Type	Non-glossy
Distortion (nonlinear)	<0.1%
Sensing Prism Hardness	750 Hk (6.8 Mohs)
Light Source	Red LED
Lifetime (typical)	60,000 hours
Ambient Light Tolerance	5,000 Lux

## Electrical

Power Supply	Via USB connection
Operating Voltage	5V ± 5%
Maximum Current	99 mA
ESD Tolerance	> ± 15 kV

## Communication

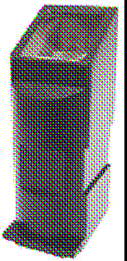
Interface	USB 2.0
Communication Speed (max)	12 Mbps
Image Capture Speed (continuous)	0.1 second (<0.4 with Smart Capture)
Image Capture Speed (snapshot)	0.2 second (<0.6 with Smart Capture)
Latent Fingerprint Check Delay	0.01 second

## Other

Operating Systems Supported	Windows Vista, XP, 2000, Me, 98 SE, Server 2003
Warranty	Two-year limited
Software Compatibility	

## What's Inside

At the heart of the M2-Hamster™ *Plus* is the FDU03FRS™ sensor, made With the ultra-precise OPP03-series optic module



## More Sensor Features

- Works even better with dry, moist, aged, scarred and difficult-to-scan fingerprints
- Highly durable and rugged – proven to resist electrostatic shock, impact, drops, scratches, extreme temperatures, humidity, electrostatic discharge, and contaminants (sweat, dirt, oil, etc).
- Ultra-precise, FBI-compliant 500 DPI resolution
- Patented Surface Enhanced Irregular Reflection (SEIR™) optical technology for clear image quality with high contrast, high signal-to-noise ratio, and practically no distortion
- High Sensor-to-Sensor Consistency for high accuracy when matching templates enrolled with different fingerprint readers
- Solid engineering and superior materials allows for use under extreme conditions
- Can be integrated into all M2SYS fingerprint software applications

