PALMKI sensor

Datasheet

General information:

- FAR: under 0.00001% and FRR: 1.0% (no retry) (with I33 format)
- New sensor is 50% smaller than the original sensors
- Reduced dimensions for easier integration where footprint matters
- Exposure time reduced to prevent blurring when capturing palm vein data which improves enrollment and authentication
- Frame rate is increased to capture a slowly moving palm
- Improvement in environmental tolerances especially temperatures and exposure to sunlight
- PALMKI Software provides fast and easy integration to most applications, shortening time to market

www.palmki.eu

PALMKI biometric authentication technology for any application.

PALMKI technology is a palm vein based authentication solution that utilizes industry-leading vascular pattern biometric technology.

The PALMKI sensor uses near-infrared light to capture a person's palm vein pattern, generating a unique biometric template that is matched against pre-registered user palm vein biometric templates.

And now PERFECT ID has raised the bar with the PALMKI Solutions that enhances the capture and authentication of templates.

System integrators who want to provide their customers with the ultimate in biometric identification can now leverage PALMKI Solutions.

The PALMKI sensor is 50% smaller than the original sensor, making it easier to install when and where footprint really matters. Reduced exposure time enables the PALMKI sensor to capture and authenticate templates more quickly, even the ability to capture a slowly moving palm. And changes to environmental tolerances enable PALMKI to operate in higher ambient sunlight and a wider range of temperature conditions.

The PALMKI palm vein device can only recognize the pattern if the blood is actively flowing within the individual's veins, which means that forgery is virtually impossible. This advanced, vascular pattern recognition technology provides highly reliable authentication.

The PALMKI technology false accept rate is just 0.00001 percent with an exceptional false reject rate of 1.0 percent, all in a small form factor that generates extremely fast authentication, usually under one second.

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PALMKI sensor Specifications

Reading system:	Near-infrared light pattern capture
Scope of capture:	Entire palm
Capturing distance:	40-60mm Enrollment and 35-70mm Authentication
Dimensions Width:	29 x Depth 29 x Height 13mm
Weight:	Below 12 g
Voltage of Power supply:	4.4 to 5.4 V
Current consumption:	500 mA (Max at normal-power mode)
	900 mA (Max at high-power mode)
Power saving mode:	50 mA (Max)
Power consumption:	2.5 W (MAX AT NORMAL-POWER MODE) ;
	4.5 W (MAX AT HIGH-POWER MODE)
Power source:	Provided by the USB Interface cable
Host interface:	USB 2.0 Cable; Maximum length supported is 4m
Interface connector:	Series "Micro-B" plug (with 5 pins)
Installation environment:	Installation angle Full direction
	Temperature -40 to 85˚Celsius
	Humidity 20 to 90% RH
	IP44 Drip proof structure
Material surface Sensor:	Glass
Encryption method:	AES (Length of cryptography key more than 128 bit)
Authentication rate:	FAR: under 0.00001%
	FRR: 1% (no retry) (w/I33 format)
Applicable Standards:	Electromagnetic wave standard VCCI CLASSB, FCC CLASSB, EN CLASSB
	Safety Standard UL60950-1, EN60950-1
	Environmental Regulation CONFORMS TO ROHS AND WEEE
Warranty:	1 Year
Mean Time Between Failure:	1 Million hours

Operating Systems Supported:

Professional Edition:

- Windows 7 SP1 (x86 and x64)
- Windows 8.1 Update (x86 and x64)
- Windows 10 ver. 1607 (x86 and x64)
- Linux (x64)(kernel 2.6.32 or later)

Enterprise Edition

- Windows Server 2008 R2 SP1 (x64)
- Windows Server 2012 (x64)
- Windows Server 2012 R2 Update (x64)
- Windows Server 2016 (x64)
- Linux (x64) (kernel 2.6.32 or later)