

U.are.U® 5100 Module

FIPS 201 PIV, Certified USB Fingerprint Module



APPLICATIONS

- Mobile ID terminals
- Compact embedded devices
- Battery-operated devices
- Devices requiring PIV standards

FEATURES

- FIPS 201 PIV certified
- Low power consumption
- Fine-grained power control
- Compact size
- Landing lights for finger tracking
- Red/green status LEDs
- Blue illumination
- 500dpi and 1000dpi images
- High-durability glass top surface
- IP64-rated top surface sealed against dust and liquid
- High quality fingerprint image
- Counterfeit finger rejection
- Compatible with U.are.U SDKs

PRODUCT DESCRIPTION

The U.are.U 5100 Module is a miniature USB fingerprint reader designed for integration into OEM equipment where fingerprint verification or identification is needed. It is tailored to the unique form-factor, power, usability and durability requirements of mobile ID devices, particularly those used in public-facing Civil ID applications such as voting, benefits-checking and micro-finance.

This self-contained module optically scans the fingerprint when the user touches the glass imaging window. Optical technology offers the highest combination of durability and ease of use.

The U.are.U 5100 Module is designed to simplify OEM integration. The top surface of the module is IP64-rated, sealed against dust and liquids*. Its compact size and convenient mounting features help it fit easily into even small devices. The on-board electronics automatically control calibration and data transfer over the USB interface.

The U.are.U 5100 is designed to meet and exceed the FIPS 201 Personal Identity Verification (PIV) Image Quality Specification, a key industry standard. It produces 500 and 1000 dot-per-inch (dpi) fingerprint images in ANSI and ISO/IEC standard formats.

The U.are.U 5100 Module can be used with any standards-compatible fingerprint templates extractor or matcher, including the DigitalPersona® FingerJet™ Biometric Engine.

ABOUT CROSSMATCH™

Crossmatch helps organizations solve their identity management challenges through biometrics. Our enrollment and authentication solutions are trusted to create, validate and manage identities for a wide range of government, law enforcement, financial institution, retail and commercial applications. Our solutions are designed using proven biometric technologies, flexible enrollment and strong multi-factor authentication software, and deep industry expertise. We offer an experienced professional services capability to assess, design, implement and optimize our identity management solutions for a customer's individual challenges. Our products and solutions are utilized by over 200 million people in more than 80 countries.

Learn more at www.crossmatch.com

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RATINGS

Supply Voltage	5.0V ±5%
Supply Current—scanning	< 120 mA (Typical)
Supply Current—idle mode	< 120 mA (Typical)
Supply Current—suspend mode	< 0.5 mA (Maximum)
Temperature, Operating	0 - 40 C
Humidity, Operating	20% - 80% non-condensing
Temperature, Storage	-10 - 60 C
Humidity, Storage	20% - 90% non-condensing
Scan Data	8-bit grayscale
Top Surface	IP64-rated seal between top case and glass surface*
Interface	USB 2.0 High Speed
Weight	20 grams
Standards Compliance	FIPS 201 PIV, RoHS, WEEE, UL, USB, WHQL, REACH, CE, FCC, VCCI, AS/NZS, BSMI, KCC

CONNECTOR POINTS

USB

Pin 1: +5V

Pin 2: Ground

Pin 3: Ground (shield)

Pin 4: USB D-

Pin 5: USB D+

CONNECTOR TYPE

Hirose DF13-SP-1.25DS/equivalent

AUXILIARY LED CONNECTOR

Pin 1: Aux LED Left

Pin 2: Aux LED Right

Pin 3: GND

Technical data subject to change without notice.

**IP64 rating is for the seal between the top case and the glass imaging window. Devices containing the embedded module must seal the module top case to their chassis or housing to extend the IP64 protection to the device.*

KEY SPECIFICATIONS

- Pixel resolution: 500dpi (native), 1000dpi (interpolated)
- 8-bit grayscale (256 gray levels)
- Scan capture area: 12.8 mm x 16.5 mm
- Module size: 52 mm (l) x 31.4 mm (w) x 15.8 mm (h)
- USB 2.0 (High Speed)

Corporate Headquarters:

Crossmatch Technologies, Inc.
3950 RCA Boulevard, Suite 5001
Palm Beach Gardens, FL 33410 USA

www.crossmatch.com