# U.are.U® 4500 Module UID Edition

USB Fingerprint Module



## APPLICATIONS

- Mobile ID terminals
- Compact embedded devices
- Civil ID/Voting/Entitlement
- Micro Finance and Healthcare

## FEATURES

- Low Power consumption
- Fine-grained power control
- Compact size
- Landing lights for finger tracking
- Red/green status LEDs
- Blue illumination
- 500dpi images
- High-durability glass top surface
- FIPS 201 PIV and STQC certified
- High quality fingerprint image
- Counterfeit finger rejection

## PRODUCT DESCRIPTION

The U.are.U 4500 UID Edition Fingerprint Module is certified for both FIPS 201/PIV 071006, FBI Mobile ID FAP 10, and STQC Standards. It produces 500dpi fingerprint images in ANSI and ISO/IEC standard formats. The hard glass imaging window is sealed against dust and liquids (IP64) and is highly resistant to chemical and physical damage. On-board electronics automatically control calibration and data transfer over the USB Interface.

This self-contained module optically scans the fingerprint when the user touches the glass imaging window. The U.are.U 4500 UID Edition Module can be used with any standards-compatible fingerprint template extractor or matcher, including the Fingerjet™ Minex -certified Biometric Engine.

The U.are.U 4500 UID Edition Fingerprint Module is designed for use with a full range

of Crossmatch® U.are.U Software Development Kits. Easy to program and integrate, the U.are.U SDK runtime environment is free to distribute with customer applications. Whether you are an OEM or system integrator, Crossmatch's Biometric identify verification solutions provide a natural extension to your applications.

# U.are.U® 4500 Module UID Edition
## USB Fingerprint Module
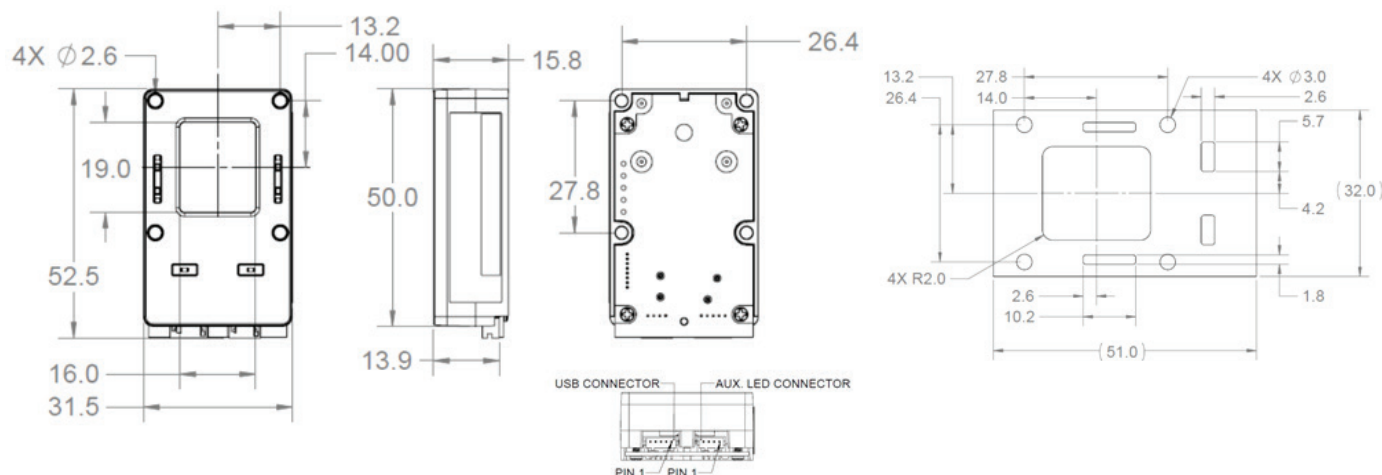


### RATINGS

| | |
|---|---|
| Supply Voltage | 5.0V ±5% |
| Supply Current—scanning | < 110 mA (Typical) |
| Supply Current—idle mode | 50 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 | 22 grams |
| Standards Compliance | FIPS 201 PIV, RoHS, WEEE, UL, USB, STQC |

### CONNECTOR PINOUTS

**USB**

**Pin 1:** +5V

**Pin 2:** Ground

**Pin 3:** Ground (shield)

**Pin 4:** USB D-

**Pin 5:** USB D+

**Connector Type:**

Hirose DF13-5P-1.25DS/ equivalent

**Auxillary LED Connector**

**Pin1:** Aux LED Left

**Pin 2:** Aux LED Right

**Pin 3:** GND

**Pin 4:** +5V

### KEY SPECIFICATIONS

- Pixel resolution: 500dpi (native) 1000dpi (interpolated)
- 8-bit grayscale (256 gray levels)
- Scan capture area: 12.8mm x 16.5mm
- Platen size: 16.0 mm x 19.0 mm
- Module size: 52mm (l) x 31.4mm (w) x 15.8mm (h)
- USB 2.0 (High Speed)

*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.*

## ABOUT CROSSMATCH

Crossmatch® solutions solve security and identity management challenges for hundreds of millions of users around the world. Our proven DigitalPersona® Composite Authentication solution is designed to provide the optimal set of authentication factors to meet today's unique risk requirements and afford complete enterprise authentication coverage. Crossmatch identity management solutions include trusted biometric identity management hardware and software that deliver the highest quality and performance required for critical applications. Our solutions support the financial, retail, commercial, government, law enforcement and military markets. With 300 employees and customers in more than 80 countries, Crossmatch sets the standard for innovation and reliability. Learn more: Crossmatch.com

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