U.are.U® 4500 Module
USB Fingerprint Reader Module

APPLICATIONS

- PC peripherals, keyboards
- Kiosks, point-of-sale terminals
- Physical entry devices
- Time and attendance terminals

FEATURES

- Small form factor
- Blue LED (in idle mode)
- Excellent image quality
- Encrypted fingerprint data
- Latent print rejection
- Counterfeit finger rejection
- Rugged
- Works well with dry, moist, or rough fingerprints
- Compatible with U.are.U SDKs

PRODUCT DESCRIPTION

The U.are.U 4500 Module is a miniature USB fingerprint reader designed for integration into OEM equipment where fingerprint verification or identification is needed.

This self-contained module optically scans the fingerprint when the user touches the glowing window. Optical technology gives the highest quality fingerprint scans and reliability.

The U.are.U 4500 Module is designed to simplify OEM integration. The module is sealed from dust and includes convenient mounting features. The on-board electronics automatically control calibration, encryption and data transfer over the USB interface.

The "Small Footprint Outline" version of the module is ideal for space-constrained applications such as keyboards, touch screens and POS terminals.

The U.are.U 4500 Module and FingerJet™ matching engine have an unmatched ability to authenticate even the most difficult fingerprints accurately and rapidly. Crossmatch™ enterprise solutions and developer tools are perfectly suited to this device.

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

U.are.U® 4500 Module
UPS Fingerprint Reader Module

CROSSMATCH™

SPECIFICATIONS

Main Processor	Intel Atom® N2600 Dual Core – 1.6 GHz	
Supply Voltage	5.0V ±5%	Pin 1: +5V
Supply Current—scanning	< 100 mA (Typical)	Pin 2: Ground
Supply Current—idle mode	120 mA (Typical)	Pin 3: Ground (shield)
Supply Current—suspend mode	< 0.5 mA (Maximum)	Pin 4:USB D-
ESD Susceptibility	>15 kV, mounted in case	Pin 5: USB D+
Temperature, Operating	0 - 40 C	
Humidity, Operating	20% - 80% non-condensing	Connector Type - Standard Outline:
Temperature, Storage	-10 - 60 C	Hirose DF13-5P-1.25DS/equivalent
Humidity, Storage	20% - 90% non-condensing	Connector Type - Small Footprint:
Scan Data	8-bit grayscale	Hirose DF13-5P-1.25DSA/equivalent
Standards Compliance	RoHS, WEEE, UL, USB, WHQL	
Weight	16 grams	
Image Distortion	< 1% (Typical)	
Speed of Image Transfer	6 fps (Typical)	
Interface	USB 2.0 Full-speed High Power Device	

KEY SPECIFICATIONS

- Pixel resolution: 512 dpi (average x, y over the scan area)
- Scan capture area: 14.6 mm (nom. width at center) 18.1 mm (nom. length)
- 8-bit grayscale (256 levels of gray)
- Module size - standard outline (approximate): 60.2 mm x 32.4 mm x 11.0 mm
- Compatible with USB 1.0, 1.1 and 2.0 (Full Speed) specifications
- Indoor, home and office use

PART NUMBER	FORM FACTOR
50012-001	Standard outline
50012-F01	Small footprint
Data subject to change without notice	

20160122