

# NB-2023-U-UID Module

One Touch.  
**One You.**  
NEXT Biometrics

## N B - 2 0 2 3 - U - U I D

The NB-2023-U-UID is a large-area fingerprint sensor module designed for integration into products such as notebooks, tablets, mobile phones, MicroATM, and eKYC applications. The NB-2023-U-UID relies on the NEXT NB-0510-S sensor chipset mounted on a small printed circuit board for seamless hardware integration. The module connects to a USB hub or embedded USB host.

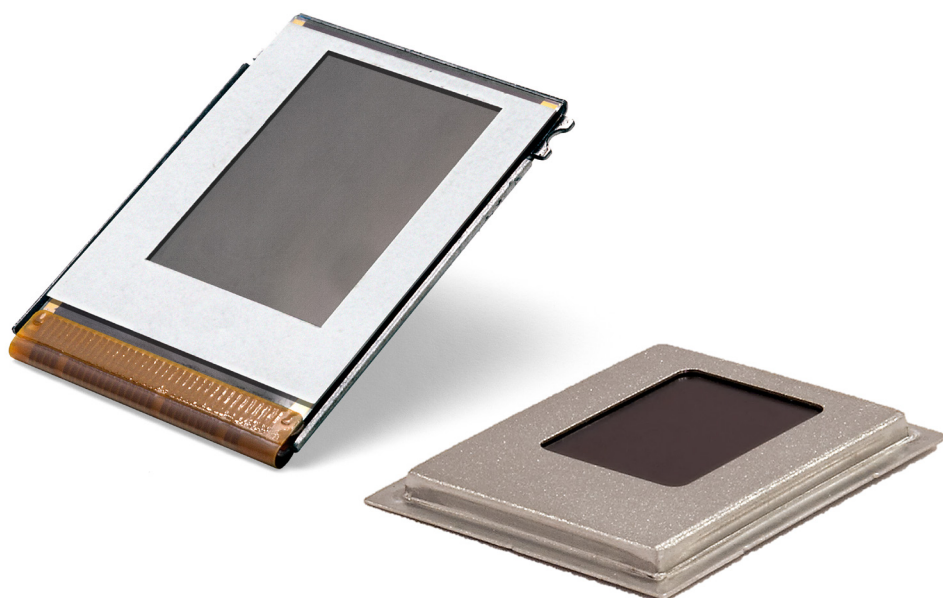
The module works with the patented *NEXT Active Thermal*<sup>®</sup> principle. The sensor technology is tolerant against dirt, grease and varying environmental conditions. The large active area of the NB-2023-U-UID allows stable imaging, intuitive user operation and is ideally suited for mass market applications in need of both security and convenience. The NEXT technology makes a high quality sensor available to price sensitive applications without compromising functionality or performance.

The NB-2023-U-UID Module is intended exclusively for the Aadhaar market in India. The module has been STQC certified in combination with the latest MINEX III certified algorithm from Innovatrics.

NEXT Biometrics offers the NB-2023-U-UID Module together with a Level-0 Registered Device Service (RDS) for Microsoft Windows 7, 8.1 and 10, Linux, and Android. Level-0 RDS implementations are also STQC certified.

### DESIGNED FOR INTEGRATION INTO:

- POS terminals
- MicroATM terminals
- eKYC
- Notebooks
- Tablets
- Mobile phones



## TECHNICAL SPECIFICATIONS

Sensor technology	<i>NEXT Active Thermal</i> <sup>®</sup> sensing (patented)
Total dimensions (mm)	NB-2023-U-V-UID: 20.90 x 27.39 x 2.53 NB-2023-U-NF-UID: 26.48 x 33.21 x 2.83
Active sensing area (mm)	11.9 x 16.9
Optical equivalent resolution (ppi)	500 (demonstrated per PIV test)
Pixels	180 x 256
Gray scale levels	256
Image scan time (s)	0.53
Finger detection	Hardware-assisted, low power
Total process time MINEX extraction and PID block creation	< 1s (depends on host)
Power supply	5.0 V (USB)
Current consumption (mA)	75 (typical); < 150 (max)
Standby current consumption (µA)	< 500
Logical Interface	USB 2.0 full-speed
Physical Interface	6 pin FFC connector
MINEX template extractor	Innovatrics ANSI/ISO SDK v2.03, MINEX III certified
Biometric error rates	< 2% FNMR @ 0.01% FMR
Ingress Protection	Ready for IP55
ESD protection	±8 kV contact discharge , ±15 kV air discharge, according to IEC 61000-4-2
Mechanical durability	2 million touches @ 2.45N
Scratch resistance	Durable lifetime coating, hardness > 9H
Operating conditions	-10 °C to +60 °C at 95% RH (non condensing)
Storage conditions	-20 °C to +70 °C at 95% RH (non condensing)
Module designed to enable	CE, FCC, RoHS, WEEE, STQC for UIDAI
Ordering options	NB-2023-U-NF-UID (USB module with bezel) NB-2023-U-V-UID (USB module bezel-less)



[www.nextbiometrics.com](http://www.nextbiometrics.com)

Copyright © 2018 NEXT BIOMETRICS GROUP ASA, all rights reserved. Specifications are subject to change without notice. The NEXT Biometrics logo and *NEXT Active Thermal*<sup>®</sup> are trademarks of NEXT BIOMETRICS GROUP ASA in Norway and other countries. All other brand and product names are trademarks or registered trademarks of their respective owners.

Document version: V1.5 / 05.01.2019