NEXT BIOMETRICS NB-2023-U2-V

The NEXT Biometrics NB-2023-U2-V product is a high quality, bezel-less USB fingerprint area sensor module designed for integration into custom application products such as notebooks, tablets, USB peripherals, POS and access control terminals. It relies on the NEXT 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 fingerprint sensor module works with the patented NEXT Active Thermal® principle. The sensor technology is tolerant against dirt, grease and varying environmental conditions. The large active area of the NB-2023-U2-V allows stable imaging, intuitive user operation and is ideally suited for mass market applications in need of both security and convenience.

The NEXT technology enables an economical production process and makes a quality sensor available to price sensitive applications without compromising functionality or performance. NEXT Biometrics offers a turnkey biometric subsystem by providing hardware drivers and a complete biometric SDK based on a NEXT-certified partner algorithm for a variety of host platforms.

NB-2023-U2-V is ready for WBF and Windows Hello. USB host drivers are available for Windows, Android and Linux.

APPLICATION EXAMPLES

- Notebooks
- Tablets
- USB peripheral devices
- POS terminals
- Access control terminals

TECHNICAL SPECIFICATIONS

Sensor technology	NEXT Active Thermal® sensing (patented)	Physical interface	6-pin FFC connector
Total dimensions	20.9 × 27.37 × 2.53 mm3 (including connector)	ESD protection	±8 kV contact discharge, ±15 kV air discharge per IEC 61000-4-2
Active sensing area	11.9 × 16.9 mm²	Mechanical durability	> 2 million touches @ 2.45 N
Pixels	180 × 256	UV light resistance	ASTM D-4329-5, cycle A
Resolution	385 ppi (pixel size 66 µm * 66 µm)	Ingress protection	Designed to enable IP68 rating in end products
Gray scale levels	256	Scratch resistance	Durable lifetime coating, hardness ≥ 9H
Image scan time	0.53 s	Operating conditions	-10 °C to +60 °C at 95% RH (non-condensing)
Power supply	5.0 V	Storage conditions	-20 °C to +70 °C at 95% RH (non-condensing)
Scan mode current draw	75 mA (typical)		
Standby mode current draw	362 µA (maximum)	Certifications	CE, FCC, RoHS, and WEEE
Logical interface	USB 2.0 full-speed interface	Ordering options	USB module with WBF driver license: NB-2023-U2-VANT