BioStation 2a

Feel the Power of AI



BioStation 2a represents a significant step in the evolution of security technology. It introduces deep learning into fingerprint recognition, enhancing access control with multiple credential options. The core innovation lies in its embedded AI processor, the NPU (Neural Processing Unit), finely tuned for deep learning, resulting in remarkable precision and speed in fingerprint recognition. Explore the future of security with BioStation 2a.

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BioStation 2a

Feel the Power of AI

The World's First AI Security Solution Offering Unparalleled Security

The World's First Deep-Learning Processor Adopted

BioStation 2a is powered by an AI processor, the NPU (Neural Processing Unit). This ensures lightning-fast and precise fingerprint recognition, setting new standards for security solutions for the first time in the world.

Over 30% Improvement in Fingerprint Recognition

Through deep learning, the accuracy of fingerprint recognition is increased extensively. The ability to extract templates from low-quality fingerprints, such as those that are noisy or distorted, has significantly improved.

x5 Higher Capacity : Up to 100,000 Users

Increase the capacity by fivefold, from 20,000 to an impressive 100,000. Even with this substantial capacity expansion, BioStation 2a boasts enhanced speed, thanks to its upgraded Processor, now running at 1.5GHz, and the application of Neural Processor Unit (NPU) technology.



Specifications

Model Name	BS2A-ODPB	BS2A-OAPWB
RF Option	125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire, EV1/EV2/EV3, FeliCa	125kHz EM, HID Prox & 13.56MHz MIFARE, Plus, DESFire EV1-EV3, FeliCa, iCLASS SE/SR/Seos
RF Read Range	EM/MIFARE/DESFire/HID: 50 mm, HID Prox/FeliCa: 30 mm	
Mobile	NFC, BLE	
Live Finger Detection	Supported (SW-based)	
CPU & Memory	1.5 GHz Quad Core / 16 GB Flash + 2 GB RAM	
Crypto Chip	Supported	
Max. User	500,000 (1:1) / 100,000 (1:N)	
Max. Credential	Fingerprint (1:N): 100,000 | Card/PIN: 500,000	
Max. Text Log	5,000,000 logs	
LCD Display	2.8" color TFT LCD (320 × 240 pixels)	
Wi-Fi	Not Supported	Supported (802.11 b/g/n 2.4GHz)
Ethernet	Supported (10/100 Mbps, auto MDI/MDI-X)	
RS-485 / Protocol	1 ch Master / Slave (Selectable) / OSDP v2 compliant	
Wiegand & Relay	1 ch In, 1 ch Out / 1 Relay / 3 ch Inputs	
USB / Tamper	USB 2.0 (Host) / Tamper Supported	
Power	12Vdc (Max 0.8A) / 24Vdc (Max 0.4A) / PoE (IEEE 802.3af)	
IP Rating / Temp	IP65 / -20°C – 60°C (-4°F – 140°F)	
Dimensions	142 × 144 × 45 (Bottom) / 37.8 (Top) (mm)	
Certificates	CE, UKCA, KC, FCC, RCM, SIG, RoHS, REACH, WEEE	

Complete Access Control : Your Security, Your Way

Multiple Credential
Offer fingerprint recognition, mobile access (NFC/BLE), and RFID card options making authentication easier.

Large-scale Data Processing Capacity
Enable matching up to 100,000 fingerprint recognition templates, and storing up to 5,000,000 logs.

Customize Features
Enable integration and simple adding-on new features with an extended USB host port.

Versatile Environment Adaptation
Whether indoors or outdoors, IP65 rated and operates from -20°C to 60°C for extreme durability.

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