NIRIKHON

SECURITY & DEFENCE TECHNOLOGY

PRODUCT BROCHURE

ACCESS CONTROL DEVICE

AI Face Recognition Access Control System

The AI Face Recognition Access Control System by NIRIKHON (Model NK-FM-AI06F/Access) delivers ultra-fast recognition in under 0.02 seconds, engineered for institutional access control and command & control operations. Anti-spoofing live face detection ensures tamper-proof verification, while multi-authentication support (Face, Fingerprint, RFID, Password, QR) enables flexible security enforcement. With 10,000-face capacity and web-based management, it delivers mission-critical, audit-ready reliability.

AI Face Recognition Access Control System

Official Brochure

SOLUTION SNAPSHOT

Dynamic AI Face Recognition Engine — Instant Recognition (<0.02s)	**Anti-Spoofing Live Face & Mask Detection**	**High-Definition 2MP+ IR Camera with WDR**

5-Inch+ IPS Touch Display with Intuitive Interface	**5-in-1 Multi-Factor Authentication**	**1-Year Device Warranty with Lifetime Service Warranty**

OVERVIEW

Built for Real Operations 01

The AI Face Recognition Access Control System by NIRIKHON (Model NK-FM-AI06F/Access) delivers ultra-fast recognition in under 0.02 seconds, engineered for institutional access control and command & control operations. Anti-spoofing live face detection ensures tamper-proof verification, while multi-authentication support (Face, Fingerprint, RFID, Password, QR) enables flexible security enforcement. With 10,000-face capacity and web-based management, it delivers mission-critical, audit-ready reliability.

CAPABILITIES

Key Features & Product Modules 02

High-Performance AI Facial Recognition Processing Core

The onboard AI engine executes dynamic face matching and live anti-spoofing checks in ≤0.02 seconds, instantly rejecting photo, video, or mask-based intrusion attempts before granting terminal access.

Multi-Biometric Authentication Sensor Array (Fingerprint, RFID, QR & PIN)

Beyond facial recognition, the terminal integrates fingerprint, RFID card, QR code, and PIN authentication into one unit—giving Access Control Divisions layered, fallback-ready identity verification for every clearance tier.

5-Inch+ High-Resolution IPS Touchscreen Display

The 5-inch or larger IPS touch panel gives operators and enrolled personnel a fast, responsive control surface, displaying real-time verification results and system status at the point of entry.

2MP+ WDR High-Definition Infrared Camera Module

A 2-megapixel-or-higher camera with Wide Dynamic Range and infrared illumination captures clear, high-accuracy facial data around the clock — compensating for harsh backlight by day and near-zero visibility by night.

Multi-Protocol Communication & Relay Control Interface (TCP/IP, Wiegand & Optional Wi-Fi)

Onboard TCP/IP and Wiegand connectivity, with optional Wi-Fi, link the terminal directly into existing network and access-control infrastructure, while the built-in relay output drives door locks the instant identity is confirmed.

Electromagnetic Lock & High-Strength Aluminum Bracket Hardware Kit

A fail-safe electromagnetic lock rated at a minimum 600 kg holding force, paired with a durable aluminum door bracket, physically secures the checkpoint and automatically releases during power failure for safe emergency evacuation.

8-Port Enterprise Gigabit Network Switch & Cabling Infrastructure

An 8-port Gigabit Ethernet switch with metal housing and fanless design forms the backbone connecting every terminal, lock, and camera into a single, high-throughput Command & Control network.

Rack-Mounted Access Control Server & Central Data Storage Unit

A rack/tower-mounted server with Intel Core i5 processing, 16GB RAM, and combined SSD/HDD storage centralizes facial data, access logs, and attendance records — powering real-time monitoring and audit-ready reporting across the entire deployment.

Software, Benefits & Outcomes

Real-Time Attendance Tracking & Live Dashboard Monitoring

The web-based platform captures every verified entry and exit instantly, giving administrators a live operational view of personnel movement across all connected terminals.

- Monitor live attendance status across all access points from a single dashboard
- View real-time check-in/check-out timestamps as they occur
- Flag late arrivals or unauthorized absence patterns instantly
- Cross-reference attendance against assigned shifts in real time
- Export live snapshots for immediate command-level review

Shift Management & Overtime Calculation Engine

Automates shift scheduling and overtime computation directly from recorded access data, eliminating manual timesheet reconciliation for large personnel rosters.

- Configure multiple shift patterns for different units or departments
- Automatically calculate overtime hours based on verified entry/exit logs
- Adjust shift assignments in bulk or individually
- Track shift compliance against scheduled rosters
- Generate shift-based summaries for payroll or duty verification

Leave & Holiday Policy Configuration

Centrally defines leave entitlements and holiday calendars so attendance records automatically reconcile against approved absences without manual correction.

- Configure institutional holiday calendars in advance
- Set leave categories and entitlement rules per personnel group
- Auto-reconcile attendance logs against approved leave records
- Prevent false absence flags on scheduled holidays
- Maintain a historical leave record for audit reference

Role-Based & Time-Zone Access Permission Control

Assigns access rights by role and time window, ensuring personnel can only enter authorized zones during authorized hours—a core control for tiered-clearance facilities.

- Define access roles with specific door and zone permissions
- Restrict entry to designated time windows per role
- Instantly revoke or modify permissions for reassigned personnel
- Apply permission changes across multiple terminals simultaneously
- Maintain a permission change history for compliance review

Multi-Terminal Device Synchronization & Remote Management

Synchronizes facial data, logs, and configuration changes across every connected terminal in real time, allowing centralized control of a distributed access network from one interface.

- Push enrollment updates to all terminals simultaneously
- Monitor connection status of every device on the network
- Remotely reconfigure terminal settings without on-site access
- Synchronize access logs across locations in real time
- Maintain consistent security policy across all deployed units

Real-Time Anti-Spoofing & Mask Detection Alerts

Leverages the system's live face detection and mask-recognition capability to flag suspicious verification attempts the moment they occur, supporting immediate operator response.

- Receive instant alerts on failed live-detection attempts
- Log all anti-spoofing rejection events with timestamps
- Distinguish between mask-detected and spoof-detected events
- Review flagged attempts alongside camera-captured evidence
- Escalate repeated failed attempts for security follow-up

Automated Data Backup, Restoration & SQL Database Management

Runs on a structured SQL-based database with backup and restore capability, protecting enrollment records, logs, and configuration data against loss or corruption.

- Schedule automated periodic database backups
- Restore historical data following system disruption
- Maintain database integrity across high-volume log storage
- Support data migration during hardware upgrades
- Preserve audit-critical records against accidental deletion

Comprehensive Attendance & Access Log Reporting (PDF, Excel & CSV Export)

Converts raw attendance and access data into exportable, audit-ready reports, giving procurement and oversight bodies documentation-ready evidence on demand.

- Generate attendance reports in Excel, PDF, or CSV format
- Filter reports by date range, personnel, or access point
- Export door access logs for independent audit review
- Produce summary reports for command-level briefings
- Maintain exportable records aligned to institutional reporting cycles

Centralized User Enrollment & Multi-Biometric Profile Management

Manages enrollment across face, fingerprint, RFID, and PIN credentials from a single interface, supporting a system capacity of up to 10,000 facial profiles.

- Enroll new personnel with multiple biometric credentials at once
- Update or deactivate profiles instantly across the network
- Search and manage records within the 10,000-face capacity
- Assign multi-authentication methods per individual as needed
- Maintain a centralized, auditable enrollment history

SPECIFICATION

Technical Details

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- Dynamic AI Face Recognition Engine — Instant Recognition (<0.02s)
- Anti-Spoofing Live Face & Mask Detection
- High-Definition 2MP+ IR Camera with WDR
- 5-Inch+ IPS Touch Display with Intuitive Interface
- 5-in-1 Multi-Factor Authentication
- 1-Year Device Warranty with Lifetime Service Warranty
- Multi-Protocol Network Connectivity — TCP/IP, Wi-Fi & Wiegand
- Relay Output for Electric, Magnetic & Turnstile Lock Integration
- Extended Recognition Range — 0.5 to 2.5 Meters
- Web-Based Attendance & Access Management Software
- 10,000 Face Capacity & 500,000 Access Log Memory
- Lifetime SDK & API License for System Integration
- USB-Based Data Import & Export
- Role-Based & Time-Zone Access Permission Management

Media & Questions

NIrikhon AI Face Recognition Access Control Web Product commercial

Available with the online product presentation and deployment resources.

Q. How does the system prevent unauthorized access using a photograph, video, or mask of an authorized individual?

A. The terminal uses live face detection technology that actively distinguishes a real, present individual from a static image, video replay, or worn mask. Combined with dedicated mask-detection recognition, any spoofing attempt is rejected at the point of verification, and the event is logged for review — ensuring only genuine, live personnel can gain access.

Q. What is the system's recognition reliability in complete darkness or under extreme lighting variation?

A. The terminal is equipped with an infrared camera for low-light and night-time recognition, paired with Wide Dynamic Range (WDR) imaging to compensate for harsh backlight or uneven illumination. This combination maintains consistent facial capture accuracy whether the environment is fully dark or subject to strong, variable daylight.

Q. Can the system scale to support large personnel rosters and extended operational history without performance degradation?

A. Yes. Each terminal supports a minimum enrollment capacity of 10,000 facial profiles and stores up to 500,000 access log records, with real-time data synchronization to the central management platform. This capacity is designed to accommodate large-scale institutional deployments while preserving long-term audit history.

Q. Can this terminal integrate with existing turnstiles, electromagnetic locks, or third-party access infrastructure already in use?

A. Yes. The terminal provides relay output for direct integration with electric door locks, magnetic locks, and turnstile gates, alongside TCP/IP and Wiegand connectivity for interfacing with existing access control infrastructure. A lifetime-licensed SDK and API are also included, enabling deeper integration into broader institutional software ecosystems without recurring licensing costs.

Ready to deploy AI Face Recognition Access Control System?

Talk to Nirikhon for product consultation, installation planning, integration support, and enterprise deployment.

Hotline: 01712345678 | Website: www.nirikhon.com