NIRIKHON

SECURITY & DEFENCE TECHNOLOGY

PRODUCT BROCHURE

BODY-WORN CAMERA

AI Body Worn Camera

The AI Body Worn Camera by NIRIKHON (Model AI-BC-109) delivers sharp 40MP imaging with a 130° wide-angle lens, engineered for secure field deployment and command & control operations. AES-256 encryption with FIPS 140-2 compliance ensures tamper-proof evidence integrity, while 8-hour continuous recording and Active Noise Cancellation audio support reliable, uninterrupted field documentation. Push-to-Talk communication and AI CAM management integration enable real-time coordination.



AI Body Worn Camera | Official Brochure

SOLUTION SNAPSHOT

40MP High-Definition Imaging System	**8-Hour Continuous HD Recording / 72-Hour Standby**	**130° Wide-Angle Lens Coverage**
AES-256 Encryption with FIPS 140-2 Tamper Protection	**Active Noise Cancellation (ANC) with PTT Communication**	**2.0-Inch High-Brightness Outdoor TFT Display**

OVERVIEW

Built for Real Operations 01

The AI Body Worn Camera by NIRIKHON (Model AI-BC-109) delivers sharp 40MP imaging with a 130° wide-angle lens, engineered for secure field deployment and command & control operations. AES-256 encryption with FIPS 140-2 compliance ensures tamper-proof evidence integrity, while 8-hour continuous recording and Active Noise Cancellation audio support reliable, uninterrupted field documentation. Push-to-Talk communication and AI CAM management integration enable real-time coordination.

CAPABILITIES

Key Features & Product Modules 02

Wide-Angle Optical Lens Element

A precision-engineered 130° diagonal field of view captures expansive situational context in every frame. Built for reliable, high-fidelity image quality benchmarked to international optical performance standards.

High-Performance Video Encoding & AI System Core

Powers Full HD 1080p and HD 720p recording with H.264/H.265 compression at selectable frame rates. Enables efficient, high-clarity video output optimized for evidentiary storage and transmission.

Intelligent Infrared Night Vision & Light Sensor Array

Automatically activates infrared illumination under low-light conditions, ensuring enhanced visibility and optimized image quality for nighttime evidence collection. Delivers dependable, uninterrupted capture regardless of ambient lighting.

40MP High-Resolution CMOS Sensor Board

Delivers superior clarity and dynamic range for high-definition video and broadcast-grade audio capture. Engineered for forensic-quality image detail across varied field lighting conditions.

Broadcast-Grade Audio & ANC Noise Cancellation Module

Captures crystal-clear, high-sensitivity audio while Active Noise Cancellation suppresses ambient background interference. Ensures accurate voice recording even in high-noise operational environments.

High-Brightness Outdoor TFT LCD Display

A high-brightness, wide-viewing-angle display ensures clear visibility under direct outdoor sunlight. Engineered for low-power consumption and rapid, intuitive field operation.

Encrypted Storage & Security Microcontroller

Secures recorded data through AES-256 encryption in compliance with FIPS 140-2 standards, preventing unauthorized access, alteration, or deletion. Ensures tamper-proof evidence integrity from capture to storage.

Rugged Shockproof & Weatherproof Polymer Outer Enclosure

A dust-resistant, shock-resistant, and weatherproof housing withstands demanding field conditions across extended operational deployment. Engineered for long-term durability in tactical wearable use.

Software, Benefits & Outcomes

Enterprise Centralized CAM Management Dashboard

Provides a unified command-and-control interface for real-time oversight and administration of the entire body-worn camera fleet.

- Web-based centralized administration platform
- Scalable architecture supporting future fleet expansion
- Customizable dashboard widgets and reporting tools
- Fleet-wide status overview at a glance
- Multi-user administrative access configuration

Real-Time HD Video Streaming with Audio

Streams live HD video and synchronized audio directly from field-deployed cameras to the command center in real time.

- Live single or multi-device feed viewing
- Synchronized audio-video real-time playback
- On-demand remote stream activation
- Live stream recording and archival
- Bandwidth-aware adaptive streaming quality

Instant Push-To-Talk (PTT) System

Enables immediate one-touch voice communication between command center operators and field personnel.

- One-touch PTT activation from the dashboard
- Instant two-way voice channel connection
- Priority interrupt for urgent communications
- Communication session logging
- Multi-device simultaneous PTT broadcast

Group Calling & Dispatch Management

Coordinates multi-unit voice communication and dispatch instructions across field teams from a single interface.

- Group channel creation and management
- Simultaneous multi-personnel voice dispatch
- Priority-based dispatch queuing
- Group call session recording
- Real-time dispatch status tracking

Individual User & Field Personnel Calling

Supports direct, private voice communication between the command center and a specific field-deployed camera user.

- One-to-one direct call initiation
- Call history logging per user
- Caller identity verification display
- Call recording for operational review
- Quick-dial access to active field personnel

Individual Camera Tracking & GIS Map Monitoring

Displays real-time geographic positioning of GPS-enabled devices for live situational awareness across deployment zones.

- Interactive map-based device location display
- Real-time GPS position tracking (GPS-enabled devices)
- Historical movement path review
- Zone-based personnel grouping on map
- Location-based alert configuration

Real-Time Device Health, Battery & Storage Status

Continuously monitors operational health, battery levels, and storage capacity across all connected devices.

- Live battery percentage monitoring per device
- Storage capacity and usage alerts
- Device connectivity status indicators
- Low-battery and low-storage automated alerts
- Fleet-wide health status summary reports

Centralized Digital Evidence Management (DEM)

Consolidates recorded video and audio evidence into a secure, centrally managed digital repository for institutional access.

- Automated evidence upload from docking stations
- Structured evidence categorization and tagging
- Search and retrieval by date, device, or user
- Secure evidence export for review
- Retention policy configuration

AES-256 Encrypted Media Management & Audit Logs

Safeguards all recorded media through AES-256 encryption while maintaining a complete, tamper-proof audit trail of system activity.

- End-to-end AES-256 encrypted media storage
- Immutable, timestamp-locked audit logging
- User-action traceability across the platform
- Exportable audit reports for compliance review
- File integrity verification checks

Role-Based Access Control (RBAC) & User Permissions

Enforces hierarchical, configurable access permissions, ensuring only authorized personnel can access sensitive system functions.

- Custom role creation with granular permissions
- Tiered access from viewer to full administrator
- Session-based access logging per user
- Time-restricted access provisioning
- Instant access revocation for compromised credentials

SPECIFICATION

Technical Details 05

40MP HIGH-DEFINITION IMAGING SYSTEM
✓ Included

8-HOUR CONTINUOUS HD RECORDING / 72-HOUR STANDBY
✓ Included

130° WIDE-ANGLE LENS COVERAGE
✓ Included

AES-256 ENCRYPTION WITH FIPS 140-2 TAMPER PROTECTION
✓ Included

ACTIVE NOISE CANCELLATION (ANC) WITH PTT COMMUNICATION
✓ Included

2.0-INCH HIGH-BRIGHTNESS OUTDOOR TFT DISPLAY
✓ Included

ADAPTIVE VIDEO COMPRESSION
✓ Included

INTELLIGENT LOW-LIGHT CAPTURE
✓ Included

RUGGED FIELD-GRADE CONSTRUCTION
✓ Included

WEATHERPROOF SEALED ENCLOSURE
✓ Included

SECURE MOUNTING & CHARGING ACCESSORIES
✓ Included

INSTITUTIONAL DATA PROTECTION COMPLIANCE
✓ Included

SMART RECORDING INTELLIGENCE
✓ Included

EXTENDED SERVICE ASSURANCE
✓ Included

QUESTIONS

Frequently Asked Questions 07

Q. How does the AES-256 encryption system prevent evidence tampering, and does it align with recognized information security standards?

A. All recorded media is secured through AES-256 encryption with FIPS 140-2 compliance, incorporating record file protection mechanisms that prevent unauthorized alteration, deletion, or overwriting of captured evidence. This framework aligns with ISO/IEC 27001 information security management standards and ISO/IEC 27037 guidelines for digital evidence handling, ensuring audit-ready chain-of-custody integrity.

Q. Can the device sustain reliable operation across a full 8-hour continuous field shift?

A. Yes. The unit is rated for 8-hour continuous HD recording on a single charge, supported by intelligent power management and low-battery alert functions. Standby operation extends up to 72 hours, and the system includes automated recording triggers and low-power monitoring to optimize battery usage across extended field deployment.

Q. How effective is the Active Noise Cancellation (ANC) system in maintaining audio clarity during high-noise field operations?

A. The integrated ANC technology suppresses ambient background noise during audio capture, supporting clear voice recording in high-noise operational environments. Combined with broadcast-grade, high-sensitivity audio capture, the system is engineered to preserve evidentiary audio clarity under demanding field conditions.

Q. How is recorded evidence securely offloaded and managed through the docking/charging infrastructure?

A. The supplied docking and charging station supports structured evidence offloading into the Centralized Digital Evidence Management (DEM) platform, where footage is securely stored, categorized, and protected under AES-256 encryption. This process supports controlled data handling in accordance with institutional evidence-retention protocols.

Q. What warranty and long-term service assurance is provided for a fleet-wide body camera deployment?

A. Each unit is backed by a 1-Year Device Warranty covering hardware reliability, paired with a Lifetime Service Warranty ensuring sustained technical support throughout the operational lifecycle. This dual-coverage model is designed to minimize fleet downtime and support long-term institutional procurement value.

Ready to deploy AI Body Worn Camera?

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

Hotline: 09647 120 120 | Website: www.nirikhon.com