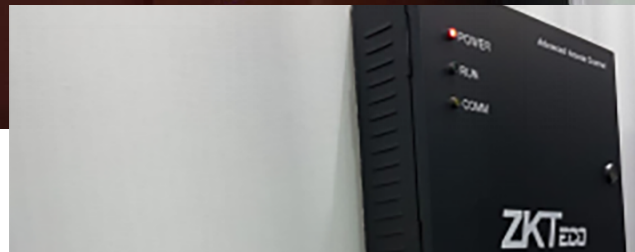


Makassar Multimedia School – Leading Institute in Indonesia Time & Attendance Management Case Study



Project Description

Project Site: Makassar, South Sulawesi, Indonesia

Makassar Multimedia School (MIS) was established in 1983 to provide an international standard of education for the children of expatriates working in South Sulawesi and Eastern Indonesia. In 1991 the school was formally licensed by the Indonesian Government as an International School. In 2006, adapting to changes in Government policy and the make-up of the Makassar community, MIS opened its doors to Indonesian students.

In 2008 MIS decided to standardize its aims and curricula around the internationally-recognized University of Cambridge IGCSE system of international qualifications. Although IGCSE exams are taken at 16, preparation starts as early as primary grade 1. Also to this aim, the school strengthened its Kindergarten program with the introduction of the highly effective Jolly Phonics reading and writing program widely used in UK state schools.

MIS are based in a newly-completed, four story, purpose-built building in the city centre close to Makassar's picturesque Pantai Losari sea front.

Project Requirements

As a reputable educational institution, MIS highly concerns their student's attendance. Here are their major requirements:

Reliable Verification Methods

In order to ensure attendance accuracy and prevent fake punching in or punching out, the very old-style signing in or conventional card punching have to be replaced as it does not satisfy the needs due to that it is not capable to verify if the card holder is the authentic person the card belongs to, yet a time & attendance system that truly verifies and authenticates the persons punching in or out does. Moreover, they also wished to ensure that students' safety is not threatened during class, thus a reliable access control of classrooms that denies any possible unauthorized access would be an ideal means. After having a deeper understanding of different time & attendance methods, our client required a hybrid biometric verification time & attendance and access system composing of fingerprint verification and face recognition functions.

Real-time Review of Attendance and Access and Report Generation

MIS also required that they would be able to centrally the monitor the entire time & attendance and access control operation of all students in the entire site, and all attendance and access logs are able to be reviewed anytime with customized report formats to suit their needs.

End User: Makassar Multimedia School

Configurations

System	Device Name	Device Model	Device Quantity
Access Control	Access Control Panel	InBio Pro 460	4
	Fingerprint Reader	FR1500WP	32
Time & Attendance	Hybrid-biometric Standalone Terminal	ZKTeco G3	2
Access Control	Access Control Software	ZKBioSecurity	N/A
	Access Control Panel	InBio Pro 460	4

Technical Features

- Two units of ZKTeco G3 Hybrid-biometric Time & Attendance Standalone Terminals are deployed at the main entrance of the school.
- All students' identities are registered with their fingerprints and face images recorded for both time & attendance and access control use.
- All students are required to scan either their fingerprints or faces for attendance taking. All fingerprints and faces are read by the G3 terminals. They are only eligible to punch in after successful verification.
- An FR1500 Access Control Fingerprint Reader is installed outside each classroom.
- All students are required to scan their fingerprints for verification. They are only eligible to enter the classrooms upon successful verification of the identities.
- All of them are centrally controlled and managed by the ZKBioSecurity 3.0 software.
- As the G3 terminals and all the FR1500 fingerprint readers are connected via InBio Pro 460 Access Control Panels, students' personal information, fingerprint and image data are mutually shared, thus not requiring students to register one more time for the access of classrooms.
- All devices are connected to and centrally managed by the ZKAccess 3.5. Thus all time & attendance and access control data are able to be instantly monitored and reviewed by the management staffs.

Functional Description

- G3 is a multi-biometric identification terminal which features ZKTeco's innovation Z-ID fingerprint sensor technology. With the world's cutting-edge 3D Neuron Fingerprint Algorithm, it precisely authenticates dry, wet, or rough fingerprints efficiently and accurately. Infrared technology enables the device to function automatically when fingerprints are detected. With the latest facial algorithm, it supports fake face detection.
- FR1500 is a reliable, durable and highly accurate flush-mount slave fingerprint reader, now with our next generation Z-ID sensor.
- FR1500-ID primarily connects only with InBio (and InBio Pro) panels.
- When users place their finger on the FR1500-ID Z-ID fingerprint sensor, their fingerprint template is then transferred to the InBio panel via RS485 where it is matched and compared to an access control list on the InBio panel. The door will then open if the user has access rights. The entire process takes less than 1.5 seconds.
- FR1500-ID is also IP65-rated and ideal for outdoor applications.
- FR1500-ID also includes an internal ZKAccess prox. card reader. Options exist for HID and Mifare, as well.

- InBio carries out the matching of fingerprints on the panels. The FR Series of readers transmit fingerprint templates to InBio via RS-485 for fast and accurate matching with templates stored in a data-base. InBio controllers install easily on your network and support both TCP/IP and RS-485 communication. Auto-discovery tool allows setting and modification of network parameters directly and easily.
- InBio controller firmware can be upgraded in the field. Stores up to 3,000 fingerprint templates, 30,000 card users, and up to 100,000 events and transactions. Controller is backed up in real-time in on-board SD card. Data is preserved if power is lost. InBio continues to operate if network connection is interrupted. Along with relay contacts for controlling door locks, easily programmable auxiliary relays can be used for additional control and interface to lights, alarms, annunciators, intrusion detection panels, or even extra locking devices or gate controllers.
- InBio controllers come in three sizes to suit project needs and reduce the cost of unused capacity. 1-door, 2-door, and 4-door models can be mixed and matched in an optimized system architecture. Anti-Passback, First-Card Opening, Multi-Card Opening, Duress Password Entry, and Auxiliary Input/Output Linkages are built into controller firmware.
- Free SDK is available for integrators and OEM 's to integrate the InBio controllers with their or existing security or personnel management applications. Upon request, ZK can also customize InBio firmware to meet any custom requirements.
- Access Control Management Solution. As a professional access control software, ZKAccess3.5 is designed to manage all ZKTeco's access control panels and standalone access control terminals.
- The software can simultaneously manage access control and generate attendance report. It is a desktop software which is suitable for small and medium businesses application. The brand new GUI design and humanized structure of new ZKAccess will make your daily management more pleasant and convenient.

