"World-Class Total Security System
For World-Class Bio-Health Mecca"

■ **Location :**

Osong Bio-Health Technopolis
Osong, Korea

■ **Products Used :**

iTDC-SR Access Control Panels
FINGER006SR Fingerprint Readers
SRK505 RF / PIN Readers
SR30 SMART Card Readers
SR10E SMART Card Readers
RF245 2.45GHz Long Range Readers
IDA245 2.45GHz Active Cards

■ **Application :**

Total Security Integration System

FINGER006SR

- 13.56MHz Fingerprint Identification
  (Proximity / PIN) Reader
- Various Identification Modes
- Firmware Upgrade via Remote
  Control
- Designed to Withstand ESD Shock
- Tamper Switch (2 EA)
- Reverse Polarity Protection

Osong Bio-Health Technopolis

Osong Bio-Health Technopolis is an innovative bio-cluster of science park, organized by Korea's Minister of Health and Welfare and the Committee of National Science and Technology. With the total of 4,632,000㎡ Land Mass, this complex houses several government operated organizations such as Korea Center for Disease Control and Prevention, Korea Food & Drug Administration, National Institute of Toxicological Research, and Korea Health Industry Development Institute. In addition, 58 major pharmaceutical and medical related bio-technology businesses, bio technology university, and research institutes and laboratories are situated within in the site. Osong Technoloplis is currently undergoing expansion as the secondary development of Korea National Bio Bank is under construction and tertiary development of bio technology graduate university and bio medical science research institute are being adjoined on to the site.

Project Requirement & Solution

Prohibition of unauthorized users and different access levels for employee required!

- Access control of building entrance, elevator control and different access
  level setting according to user

To prohibit the access of unauthorized users, access control devices were deployed in all of the entry points of the buildings. Registered users were able to enter the site using their identification cards and the visitors were issued visitor cards to limit access to certain areas. According to the importance of the area, IDTECK applied different identification modes: Card, PIN, and Fingerprint Identification. To maximize the access control security, IDTECK's ELEVATOR384 was deployed to limit access to certain floors of the buildings. The administrators could monitor all of the access control events in real-time from the central monitoring center in the main building.

iTDC-SR

- 4 Door Access Control Panel
- Integrations with CCTV, Alarm, Fire Alarm, BAS, BMS and etc.
- Automatic System Reset via Self-Diagnosis (Watchdog Function)
- Anti-Passback Function

Special access control system required for air sealed clean room!
- Limit access to special areas such as laboratories and experimental facilities

As for the 111 units of clean room and special facilities, IDTECK proposed the implementation of door interlocking system. This particular system not only seamlessly prevents the act of tailgating but also prevents the leakage of toxic materials as disinfection and sterilization devices are installed in the area between the two doors. In this system, after granting access on the first door, the first door must be completely closed, in order for the user to grant access on the second door. Using the input and output ports of the multi-functional iTDC-SR Access Control Panels, highly efficient interlocking systems were implemented at a reasonable cost.

Special access control system required for to prevent bringing in dangerous materials into the site!
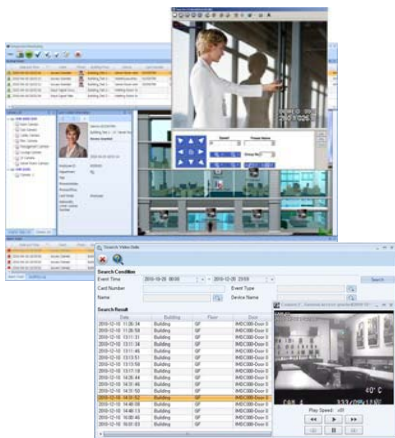- Increase the security level by implementing speed gates and metal detectors in areas where highest level of security is needed

IDTECK proposed installing speed gates in all the entrance points of the buildings to allow access only to the authorized users and visitors. Metal detectors were deployed along with the speed gates in areas where higher security is required to prevent dangerous weapons and arms from being brought in to the site.

User access event record integration with video footage required!
- Keeps a video recording of all the events that takes place within the site along with access control event data to effectively cope with emergency situations

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RF245
- 2.45GHz Long Range Reader
- Read Range up to 10M
  (3M, 5M, 10M)
- Multiple Tags Identification
  (30 Tags/sec)

Quick and efficient vehicle management required!
- Vehicle access control and parking management for vehicles coming in and out of the site

IDTECK's 2.45GHz long range reader, RF245, offered hands-free vehiclesaccess control for the regular users and visitors. IDTECK vehicle access control system provided quick entry and exit without the hassle of getting in and out of the car for authorization. In addition, bollards were installed in the drive way to deny the entry of unauthorized vehicles from entering the site.

Fire detection alarm required for securing employees and facilities!
- Activates fire alarm and automatically opens all gates to minimize causalities and damage in an event of fire

To minimize the damage and casualties, IDTECK has designed an emergency fire alarm system that automatically opens all entry doors and office doors in an event of fire. Yet, the doors of special facilities such as laboratories and experimental facilities, close and lock automatically to protect the facilities and prevent toxic materials from leaking out.

Perimeter security required for preventing break-ins and trespassing!
- Seamlessly prevents trespassing of unauthorized personnel into the site

Due to the geographical settings of the site, 1.7 KM (1.1 Miles) long microponic sensor fences were installed along the mountainous area in back of the site. As for the drive ways of the site, 2.3 KM (1.4 Miles) long infrared sensor fences were installed. All the fences are integrated with the CCTV so that when the sensor detects a movement, it records the footage of detected area.

Residence hall room management and light, heat/air-condition automation system required!
- Automatic control of lighting, heat/air-conditions, etc to provide safety as well as energy efficiency

If the IDTECK Smart Card is identified as the user enters the room, the

system is configured to automatically turn on the light and heat/air-condition of the room. When the smart card is identified for the second time, which indicates that the user is leaving the room, the system automatically turns off the light and heat/air-condition of the room. Also, real-time occupancy monitoring of residence hall rooms is available from the info desk.

Integrated monitoring system required to oversee security status of the whole site!

- Allows administrators to take immediate response to events via real-time integrated monitoring

IDTECK installed 1 jumbo screen 200 inch monitor and several number of 50 inch monitors in the central monitoring center to oversee the security status of the whole site in real-time. From a single screen, the administrators can monitor all of 1,088 entry points in 18 different buildings within the site.

After Successful Implementation

Security is one of the most prioritized concerns for the complex. IDTECK provided one of a kind security solution for Osong Bio-Health Technopolis to meet their special requirements. IDTECK's multi-functional iTDC-SR Controllers were integrated with access control, video surveillance, parking management and perimeter security to provide total security system that they requested. With successful implementation of total security system at the Osong Bio-Health Technopolis, IDTECK was selected to implement additional projects within the site. IDTECK is in charge of providing security systems for the upcoming projects in complex, which are estimated in 3.7 million dollars in sales.

About IDTECK

Long experience in biometric access control and time & attendance field, IDTECK products assure the most reliable technology out in the security market. IDTECK offers wide range of security products, to provide the best security solution to suit your needs. All of IDTECK products are certified by UL, CE, FCC, MIC, and RoHS to satisfy the standards for international exports.