



## ***Sphere*** | POWERFUL, INTEGRATED, SCALABLE

ELID's SPHERE Integrated Security System is built upon the robust and proven platform and is designed with advanced security features for the most demanding enterprise requirements. It is suited for organisations that require large numbers of access points, input/output points and is equipped with high-level encryption on a TCP/IP local area network infrastructure.

SPHERE is able to handle access control functions in a mixed mode for doors, car parks, turnstiles and lifts. It is capable of integrating intrusion supervision and CCTV to form a common supervisory and control platform. Apart from its security functions, SPHERE also offers time attendance analysis, visitor management, area tracking and other essential features. SPHERE can be monitored and controlled through a connected workstation as well as via mobile application or a web browser.

# SPHERE Integrated Security System

## Security Management for Professionals

### Highlights



#### Mini Server

SPHERE features mini server technology to improve system performance. SPHERE supports up to 16 mini servers, and allows new data from a mini server to be immediately transferred to the central SPHERE server. Monitoring and controlling a large number of doors that are widely dispersed is more efficient by using several mini servers rather than a single server.



#### Field Device (EFD) Support

SPHERE can manage up to 16 mini servers, each mini server supports up to 64 units of field devices (EFD). This translates to 1,024 units of EFD and 3,072 units of output expansion boards (16,384 sensor inputs and 32,768 general purpose outputs), which can be controlled by SPHERE. This capability makes it suitable for organizations with numerous fire doors and event-driven controls.

### Software Architecture

SPHERE is built on a client/server configuration with MSSQL as the database engine. Up to 50 workstations can be connected to the server, and multiple users can access the system simultaneously.

### Software Operation & Security



#### Intuitive Software Operation

Simple Site Plan Configuration - Administrators can easily import architectural drawings and floor plans into SPHERE. Icons that represent appropriate devices can then be 'dragged and dropped' into the correct location. This intuitive setup process results in an integrated security system that can be up and running in no time.

Single Screen User Interface - Every single component in the security system is seamlessly integrated and presented on a single screen, making operator interaction fast, convenient and intuitive.



#### Access Rights

Access rights are assigned based on User ID and Password to limit functions to be performed by an operator. This is to reduce the chances of unauthorized changes, hence maximizing data integrity. All logons and operator activities are recorded and can be retrieved for report generation and audit trail checking by an administrator.



### Key Features



#### Access Management

All standard operations, for instances, setting up a user database, assigning access time zones, and generating access reports, are handled by SPHERE.



#### Alarm Monitoring

SPHERE allows inputs such as intrusion sensors to be monitored. Depending on the configuration, SPHERE can generate outputs to activate devices such as sounders, strobe lights, etc., once an alarm is triggered.



#### Email/SMS Alert

SPHERE can send out alert messages in the form of email or SMS to registered operations staff whenever a predetermined alarm/activity occurs within the secure zone controlled by SPHERE.



#### Real-Time Activity Monitoring

Real-Time Activity Monitoring is provided by both transaction reports and a real-time graphical display. Devices are clearly shown on floor plans. Changes in status of a particular device are indicated visually, by icon colour changes or blinking, and also audibly, via a sound alert.



#### Report Generation

Transaction Report - A transaction report can be generated with multi-level filtering sorted by the categories of date/time, reader, employee, department and much more.



#### Audit Trail Report

An audit trail report shows details of an operator's actions. This allows supervisors to view what an operator has done exactly during his shift, as well as a time stamp for each action.



#### Data Generation

The card database can be imported from a standard text file. Attendance and transaction records can be exported into text/Excel formats for integration with third-party applications.



#### Data Analysis and Presentation

Behavioral Analysis - Provides data visualization of staff movement within a building and secured area, so that any abnormal behavior or activity can be identified and dealt with promptly.



#### System Dashboard

SPHERE allows the administrator to have a real-time view and status update of the entire security system, its components and people, presented via an easy-to-use, interactive graphical format.



#### Data Visualisation

Archived data can be extracted and displayed in chart form for quick and easy analysis.

## Application Modules:



### CCTV Video Integration

ELID has forged close synergistic partnerships with a selected panel of the best CCTV manufacturers to provide seamless software-level CCTV video integration. SPHERE provides an intuitive and affordable way to integrate video into your security system in order to verify access control alarms and events so as to respond promptly to emergencies and prevent losses. With the CCTV add-on module, viewing live or recorded video footage is both intuitive and convenient. Besides, this module can be configured as such that a particular alert from an access control or alarm system automatically results in the monitor display in the control room switching to a specific camera. At the same time, a short video clip is attached to the transaction log. This is particularly useful for security departments where video clips for certain transactions and abnormal events can be searched and viewed selectively.



### Time Attendance Management

The Multiple-Shift Time Attendance Module is an essential tool for workforce management. It features seamlessly integrated attendance monitoring, from which details of employees' work hours can be easily generated. First-in and last-out transactions from selected doors are extracted to generate time attendance reports such as daily/monthly attendance, punctuality, early-out, absence, overtime and leave reports.



### Visitor Management

The Visitor Management Module can work with a variety of ELID accessories such as smart card readers, web cameras, proximity readers and touch screen monitors to provide a complete and integrated solution. The VM module is designed for speed and security, featuring quick visitor enrolment and immediate background checks. Accessibility can be customized for every visitor depending on the nature of his or her visit. A detailed report comprising visitor summary and analysis can also be generated within seconds.



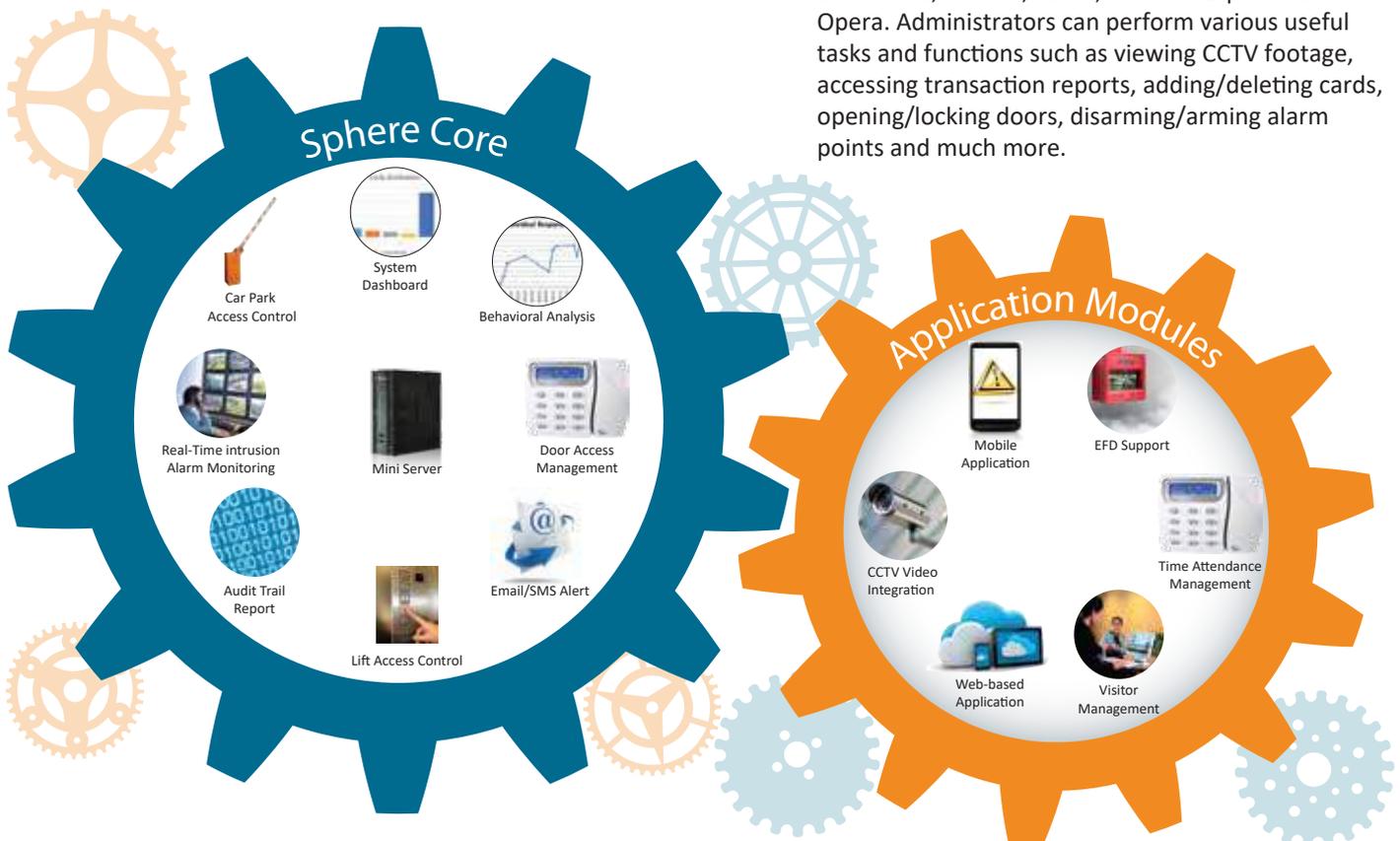
### Mobile Application

SPHERE includes a powerful mobile application with the optional EL4200 web interfacer, allowing effortless viewing and complete control from a compatible smartphone or tablet. The administrator or an authorized operator is able to receive real-time notifications of alarms or abnormal events on their smart devices. The administrator is also able to perform functions such as viewing live or recorded CCTV images, arming/disarming sensor points, opening/locking doors and viewing logged transactions.

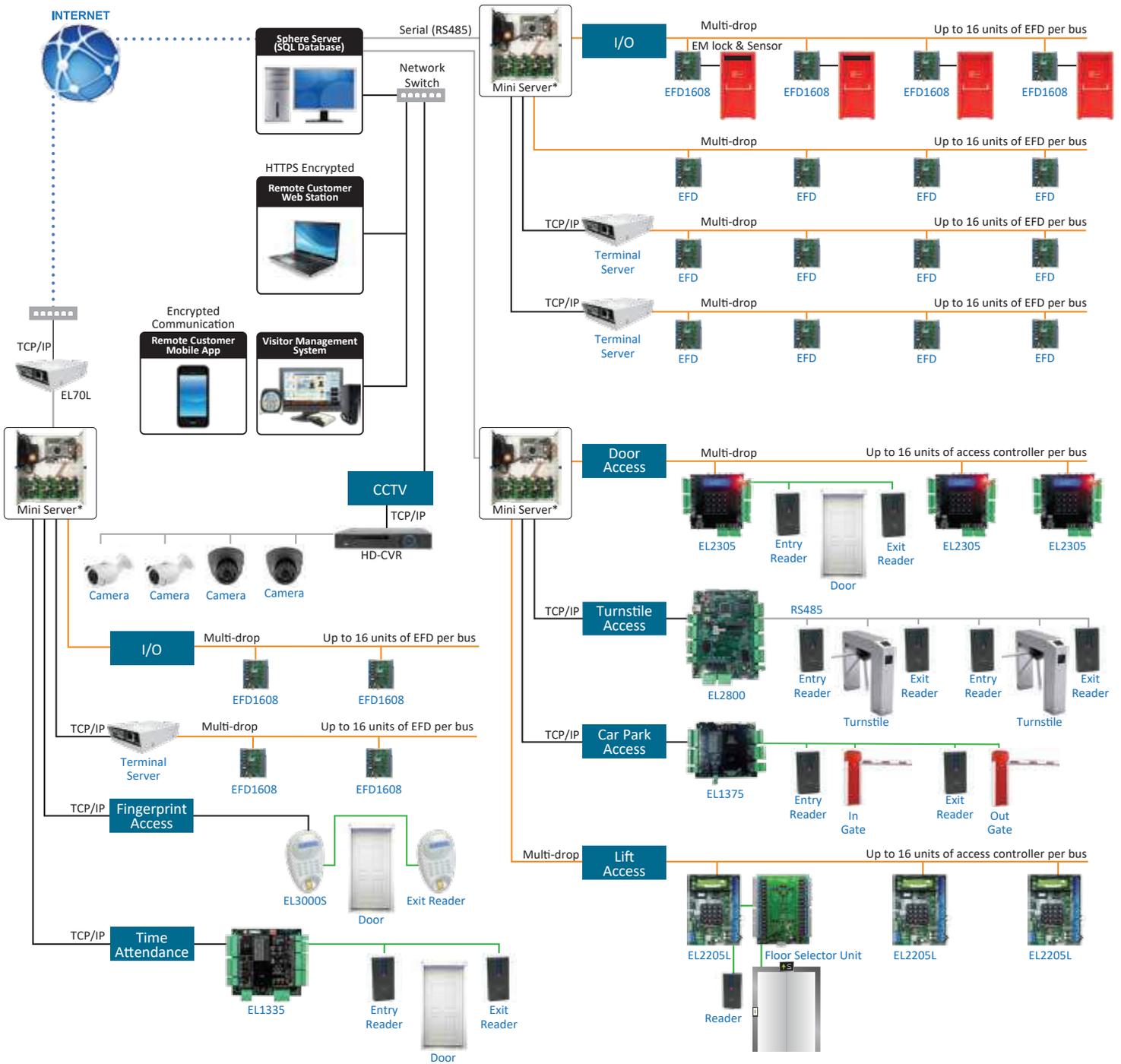


### Web-based Application

SPHERE provides a user-friendly web-based application with the add-on of EL4200 web interfacer. Administrator-level users are allowed to access SPHERE through popular web browsers such as Chrome, FireFox, Safari, Internet Explorer and Opera. Administrators can perform various useful tasks and functions such as viewing CCTV footage, accessing transaction reports, adding/deleting cards, opening/locking doors, disarming/arming alarm points and much more.



## System Configuration



Mini Server\*: Up to 64 units of EFD/access controller per mini server

### Minimum Server Requirements

Processor: Intel Core i3 @ 3.50GHz  
 Operation System: Microsoft Windows Server 2008  
 RAM: 8GB  
 Disk Space Required: 500GB  
 Monitor Resolution: 1024 x 768 pixels, 16-bit colour  
 USB Port: 1 (for Software License)  
 Interface: Keyboard and Mouse

### Minimum Client Requirements

Processor: Intel Core i3 @ 3.50GHz  
 Operation System: Microsoft Windows 10  
 RAM: 4GB  
 Disk Space Required: 500GB  
 Monitor Resolution: 1024 x 768 pixels, 16-bit colour  
 USB Port: 1  
 Interface: Keyboard and Mouse



For more information: Check out the website at [www.elid.com](http://www.elid.com), or contact our dealers. ELID has a policy of continuous research and development, and reserves the right to change specifications without notice.

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