All these brands are now under one name. 

Now Part of eMerge
Embedded Software Systems
From enterprise-wide security management to small and mid-size access control, Linear’s IEI brand has a choice of Access Systems, giving you the freedom to design a solution that truly matches your needs. Regardless of the complexity of your environment, these Access Systems are easy to install and easy to use.

Scalable. Reliable. Intuitive. Every IEI brand Access System ensures that security personnel can easily access and respond effectively to events. The systems are designed to grow as your requirements expand.

Manage the entry and exit activity to your facilities with our line of Access Systems. The range of products include eMerge with no software to install, PC Based panel systems that are secure and centrally managed, and small proximity single-door systems. We offer a choice of system solutions for every access control application.

- **Embedded Software Systems** 4
- **eMerge Access Control Platform** 6
- **eMerge Integrated Security Platform** 8
## System Choices

<table>
<thead>
<tr>
<th>Criteria</th>
<th>eMerge 5000 Integrated Security Platform</th>
<th>eMerge 50 Access Control Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>System management</td>
<td>Browser based</td>
<td>Browser based</td>
</tr>
<tr>
<td>Control</td>
<td>Programmable outputs, expandable outputs &amp; real time door control</td>
<td>Programmable outputs, expandable outputs &amp; real time door control</td>
</tr>
<tr>
<td>Monitor</td>
<td>Menu of reports &amp; queries, Live transactions</td>
<td>Menu of reports &amp; queries, Live transactions</td>
</tr>
<tr>
<td>Reader</td>
<td>Any wiegand, multiple formats</td>
<td>Any wiegand, multiple formats</td>
</tr>
<tr>
<td>Doors per site</td>
<td>140</td>
<td>32</td>
</tr>
<tr>
<td>Doors per system</td>
<td>140</td>
<td>32</td>
</tr>
<tr>
<td>Users per door</td>
<td>20000</td>
<td>5000</td>
</tr>
<tr>
<td>Users per system</td>
<td>20000</td>
<td>5000</td>
</tr>
</tbody>
</table>
Browser Managed Security With No Software Installation

eMerge is Linear’s Integrated Security Management System with embedded software. It combines powerful systems integration with an easy-to-use web browser interface. The Linux operating system, Postgre SQL database and web server, all embedded in the eMerge solid-state platform, make it both easier to use and more powerful than legacy access control and security systems. eMerge employs state-of-the-art encryption and authentication technology to ensure secure communications. Standard industry wiring is employed throughout the system.

eMerge is a network appliance that IT managers approve. Everything you need to install and manage the system is embedded within the Network Controller. There’s no server software, no client software, no gateways, no new communication wiring to install, no plug-in hardware adapters for connectivity and no software compatibility issues to deal with. All which ensure lower long-term cost of ownership compared to other systems.

**eMerge Advantages:**

- No software installation – Everything you need to run the system is included in the system controller so there are no server or computer conflicts to deal with.
- Browser managed – Access and manage your system security from anywhere in the world with a standard browser interface and web connection
- Embedded applications – All software and databases are embedded in the panel, including Postgre SQL database and web server, resulting in ease of use and installation
- Communications over existing LAN/WAN networks – eMerge uses the Internet via easy to obtain, inexpensive equipment commonly found in most offices.

![Network Topography Diagram](image-url)
eMerge System Features and Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>eMerge 50 Access Control Platform</th>
<th>eMerge 5000 Integrated Security Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-mail and SMS, LDAP Authentication</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>NAS back-up</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Burg interface</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>User photo</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Video Management System</td>
<td>No</td>
<td>Option</td>
</tr>
<tr>
<td>Live Monitoring Bundle</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Anti-Passback</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Photo ID</td>
<td>No</td>
<td>Option</td>
</tr>
<tr>
<td>Elevator control</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Threat levels</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Visitor Management System</td>
<td>No</td>
<td>Option</td>
</tr>
<tr>
<td>Alarm panel interface</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>API with data management tool</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Hardware and Software Specifications

Readers: The IEL eMerge Access Control Module supports readers and keypads that use the Wiegand Reader Protocol

Operating System: Red Hat Linux
DBMS: PostgreSQL, ODBC
e-mail Support: POP, SMTP
Encryption: SSL, SHA-1
Network: NTP, TCP/IP
Web: http, https, xml
Processor: Intel XScale-IXP425
Can Dimensions: 17” x 18” x 6 3/4”
MicroNode Dimensions: 7” x 7” x 3.5”
UL Standards: UL 294 Listed

Network Controller

Is the central control mechanism of the system, replacing older PC-based systems. The controller included a full version of Linux, a web server, ODBC-compliant PostgreSQL database server and embedded software within the Intel processor.

Expansion Nodes & MicroNodes

Allow eMerge to communicate across a LAN, WAN or the web. Each Expansion Node contains a Node Card that communicates securely with the Network Controller and manages all application functions within the Node for fail-to-the-Node operation.

Application Modules

Can customize a security panel with the components you want and where you need them. Up to 7 application modules can be mounted within a Node that include: Access Control Modules with Wiegand protocol card reader inputs, Supervised Input Modules, Relay Output Modules and Temperature Monitoring Modules.
eMerge Access Control Platform

The entry-level system that is easy to use and easy to install. It contains all the powerful advantages of the eMerge platform, but in a smaller user configuration and without the advanced monitoring and video management bundles and other high-level features. It can be easily upgraded to grow with clients' needs with no change in hardware.

Easy and complete management of all system users is accomplished from one screen including access levels, card assignments, photo ID, personal information and password protected access.

eMerge 50 Access Control Platform Features

The Integrated Security Platform contains the highlighted features below plus all the features and benefits of the Access Control Platform

**Alarm Panel Interface**
eMerge can integrate with your burglar alarm panel to arm or disarm the burglar system when authorized access has been granted to your facility. You can program eMerge to automatically arm your burglar system if the facility has been left unsecured for a predetermined amount of time. You can also remotely arm or disarm the burglar system through eMerge.

**Network Attached Storage (NAS) Back-Up**
eMerge can create database backups each night to be stored in ROM onboard the network controller and written to Network Attached Storage. The system administrator also has the ability to create database backups at any time as well as to download to off board storage at any time. A restore of the database from a backup can be made from a backup copy on the network controller. It is therefore possible to upload a copy of a database backup from any Network Attached Storage. eMerge allows system administrators to review backups by date and description as well as to select the desired backup for upload to the network controller or restoration of the current database.

**e-mail and Short Message Service (SMS)**
eMerge supports the use of e-mail notifications of alarm events. Once the system administrator sets up the e-mail server IP address or DNS name and the e-mail address of the network controller, specified users can be notified of any alarm activity. It is also possible to enter a name and a description in the system for each alarm event.

**Interactive Reports**
An easy to use query language makes the creation of ad hoc reports simple and easy. Users can produce a variety of predefined reports regarding software and security hardware configuration, event history, and the administration of people within the system. Report generation does not affect the real-time operation of the system.

**Remote Service**
The network architecture and browser interface of eMerge allows users to easily configure and service the system from in the building, across town, or across the country, using any computer with a web browser. Remote service is now a reality, permitting your service technician to troubleshoot a system without needing to travel onsite to the installation.
Access Control
The primary purpose of eMerge is to provide access control. All standard access control parameters are easily created and managed in a single view. System administrators can make access control decisions, define a variety of access levels and time specifications, write system activity into a log file, maintain a personnel enrollment database, receive signals from input devices such as door switch monitors, card readers and motion detectors, energize devices such as door locks and alarms via outputs, and provide on-screen monitoring features.

Interactive Reports
The Access Control Platform of eMerge includes many predefined reports, along with an easy-to-use interface for generating custom reports. The proprietary English-based freeform report language makes the retrieval of specific information easy for inexperienced users. Other reports are even easier to specify, and many require no typing at all. Emerge 5000 offers a custom report writer.

Easy Network Set-Up
IT managers are comfortable with eMerge because it is designed to work in their environment. A few pieces of information are all that are needed to put eMerge into action. Network node reports display all nodes in the system with IP addresses and UID (unique ID).

eMerge 50 Parts and Order Numbers

<table>
<thead>
<tr>
<th>Model</th>
<th>Order Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>eMerge 50</td>
<td>230219</td>
<td>eMerge 50 System</td>
</tr>
<tr>
<td>eMerge EXN</td>
<td>230221</td>
<td>eMerge Expansion Node</td>
</tr>
<tr>
<td>MicroNode</td>
<td>230222</td>
<td>eMerge MicroNode</td>
</tr>
</tbody>
</table>

A wide array of eMerge add-on software licenses for live monitoring, video management, badge printing and other system peripherals and supplies are available. Call Linear Customer Service or contact an authorized eMerge dealer for specific information, part numbers, and order numbers.
**eMerge Integrated Security Platform**

Able to handle a broad range of security management functions, including live monitoring, photo ID, elevator control, threat levels, video management, alarm panel interface, data interchange, regional anti-passback, LDAP authentication, roll call reporting, and visitor management. Installations of the eMerge Integrated Security Platform range in size from small, stand-alone facilities to distributed enterprises of remote sites.

**Monitoring Desktop**

Items in the event log marked with the camera icon, have associated stored video. Hovering on the camera with the mouse, displays which cameras are recorded. Clicking on the camera replays the stored video.

**eMerge 5000 Integrated Security Platform Features**

**Video Management System**

The eMerge Video Management System offers high-end video handling capabilities with live and stored video playback in a small, scalable package. The system playback analog cameras with DVR’s and IP cameras all simultaneously. All devices are network connected, and can be accessed with a common web browser. Because it runs on eMerge, no PC server is required.

**Live Monitoring Bundle**

Includes monitoring desktop, floor plans, alarm acknowledgement, and photo pop-up.

**Photo-ID**

Enables users to easily capture images and add text to create personalized custom cards or access credentials such as proximity, barcode and magstripe cards. Since Photo-ID is integrated with eMerge, a single database exists that captures all information from the access system, including access definitions and photos.

**API - Data Interchange**

The eMerge API capability is an open platform with readily available API’s and data security built into the communications architecture. eMerge API manages it’s transactions through a web service that communicates using XML data packets with embedded authentication codes. The data migration tool allows import of personnel data from other systems requiring no additional programming. *(Also available with eMerge 50)*

**Temperature Monitoring**

eMerge integrates dynamic temperature monitoring using the floor plan within "Monitoring Desktop" via interactive icons. Alarm triggers are set to indicate areas that are outside determined acceptable temperature levels. The user can choose to set the unit up to provide results in either a Fahrenheit or Celsius scale. Historical results are provided in a report or can be displayed graphically over a customizable time period.
Real-time Monitoring
Monitoring Desktop, available with the Integrated Security Platform of eMerge, allows real-time monitoring of critical system functions, including interactive floorplan, live event log, event acknowledgment, video monitoring, user image verification and control of doors.

Temperature Monitoring
eMerge integrates dynamic temperature monitoring. Historical results are displayed graphically.

Live Video Monitoring
The Integrated Security Platform of eMerge allows real-time video to be viewed. Cameras can be viewed individually, in quad views or picture-in-picture format. Cameras at different locations can easily be managed by the system and combined for viewing on a single screen. Camera pan, tilt, and zoom can also be controlled through the user interface.

Threat Level Management
System parameters and business rules can be quickly changed with one click using Threat Level Management, a feature in the Integrated Security Platform. A change in the threat level results in a change in the behavior of the security system, including portal unlock behavior, alarm event actions, function of access levels, control of doors and access privileges. A system administrator can configure threat levels, define behavioral changes based on the threat level, and set the current threat level. Threat levels are also changeable in response to alarm events.

eMerge 5000 Parts and Order Numbers

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