Innovative Architecture

**Network Controller**

Serving as the central control mechanism of the system, the Network Controller takes the place of a PC-based server on older style systems. It runs a full version of Linux and contains a web server, ODBC-compliant PostgreSQL database server. All software is embedded within the Intel processor. Users access the software by using a web browser anywhere on the network, or anywhere the Internet is available.

**Application Modules**

Allow you to build a custom security panel containing exactly the components you want, where you need them. Up to 7 application modules can be mounted within a Node. Application modules include: Access Control Modules with Wiegand protocol card reader inputs, Supervised Input Modules, Relay Output Modules and Temperature Monitoring Modules.

**Expansion Nodes / MicroNode**

Expansion Nodes and MicroNodes allow eMerge to communicate across a LAN, WAN or the public Internet. Each Expansion Node and MicroNode 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.

The Convergence of Security and IT

In today’s world, the same person frequently manages IT, physical security and networking. That’s because the technologies of encryption, bandwidth, network integrity, firewall access and physical security have converged into a new and powerful networked environment.

Security managers today must understand network edge topology, zero footprint software, high speed networking, and the integration of databases, video and other related subsystems.

The complexities of today’s security environments also create special opportunities for a product such as eMerge, with its native IP hardware technology. eMerge simplifies your IT security environment rather than complicating it.

Because eMerge does not require you to install any software or pull new wiring to any computer – you simply connect components to your data network and eMerge will recognize them – it has a zero footprint and provides control of a complete physical security environment through a web browser that is already on your PC.

eMerge changes the age-old equation of inflexible low-end security systems or over-featured, expensive high-end systems. Designed from the ground up to be a cost-effective complete solution, eMerge is a complete, scalable security management system compact enough to fit in a panel-sized box, yet powerful enough to integrate your access control, alarm monitoring and video in one system.
The eMerge™ 50 and the eMerge™ 5000 Browser Managed Security Platform from Linear, a trusted name in access control solutions, can lower the cost of ownership while increasing the value and functionality of your access control installation.

A Dramatic Leap Forward in Security Management

The time has come for a totally new innovation in the management and control of your security environment. Faster installations. No software. Geographic independence. Leverage existing network infrastructures. State-of-the-art communications.

Browser Managed
With its impressive array of powerful features, eMerge is a configurable, integrated security management and access control system. Now you can manage security functions for multiple facilities anywhere with an Internet connection.

Because eMerge is a browser managed system, it has the enormous advantage of geographic autonomy. You are able to monitor and control multiple facilities from any web browser by connecting securely to the Internet. From any location in the world you can view live event logs, video and interactive floor plans in one view, remotely lock or unlock doors, arm or disarm burglar alarm systems, and initiate system-wide changes through Threat Level status. You can also lock down the system so that control is available only from inside a facility.

Network Appliance
eMerge is a network appliance. 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.

The eMerge 50 is designed to bring the benefits of network architecture to basic access control applications. The eMerge 5000 handles a broad range of functions such as real time monitoring, elevator control and photo ID in one integrated package.

Installations for eMerge range in size from small, standalone facilities to distributed enterprises of remote sites.
**Systems Integration with Browser Interface**

eMerge provides powerful systems integration with an easy to use web browser interface. The Linux operating system, PostgreSQL database and web server, all embedded in eMerge, 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.

**A Robust Feature Set**

**Real-time Monitoring**
Monitoring Desktop allows real-time monitoring of critical system functions including interactive floor plan, live event log, event acknowledgment, video monitoring, user image verification and control of doors.

**User Records**
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 web access.

**Access Control**
All standard access control parameters are easily created and managed in a single view.

**Regional Anti-passback with Occupancy Counting**
eMerge now allows users to define access controlled regions that enforce either conventional timed anti-passback or hierarchical regional anti-passback with software tailgate detection. Occupancy counts are kept for each region, and users can program alerts when a region becomes empty or exceeds capacity.

**Roll Call Reporting with Mustering Function**
To aid in evacuation management. Version 3 includes a region-by-region roll call report. Any card reader or user with a Web browser can be used as a mustering station and multiple mustering stations can be used.

**Live Video Monitoring**
eMerge 5000 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. Version 3 significantly improves performance when large numbers of cameras are present on integrated video systems from Milestone Systems and ONSSI.

**Log Annotations**
System operators may now insert text annotations into the activity log as well as tag individual specific log entries with commentary.

**LDAP Authentication**
Version 3 supports authentication of system users via LDAP (Active Directory on Microsoft systems). Users may be selected on a person-by-person basis to be authenticated through LDAP or through the system’s own password authentication method.

**Interactive Information and Reports**
eMerge includes many predefined reports along with an easy-to-use interface for generating custom reports. The proprietary English-based free-form 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.

**Custom Reports**
Version 3 supports the creation of a variety of custom reports, allowing users to specify, add, change, or delete reports and choose a number of fields and range of events to create reports. Prompts can be added to any report, requiring the user to input data, such as a name. Reports can be automatically generated for designated users.

**Threat Level Management**
System parameters and business rules can be quickly changed with one click using Threat Level Management, including control of doors and access privileges.

**PostgreSQL Database**
An object-relational database designed to have much lower maintenance and tuning requirements than proprietary databases. Has outstanding scalability and performance. Its SQL implementation strongly conforms to the ANSI-SQL 92/99 standards. It has full support for subqueries (including subselects in the FROM clause), read-committed and serializable transaction isolation levels.

**CompactFlash Memory**
Allows for full database backups rather than partial backups. Because CompactFlash (CF) is a non-volatile memory that does not require a backup battery, data is retained indefinitely. This type of memory provides faster, more robust, and a more scalable method of database backup.

**The eMerge Advantage ...**

- A user interface securely accessed with a standard web browser under password control.
- Proven Red Hat Linux operating system embedded in the Intel processor ensures a stable platform.
- Intuitive dynamic floor plans for easy monitoring and control over complex facilities.
- Integrated management of access control, video, alarm and temperature monitoring from anywhere the Internet is available.
- Pre- and post-image video capture at designated access control and alarm monitoring points.
- Communications over existing networks or the Internet using easy to obtain, inexpensive equipment commonly found in most offices.
Authenticated and encrypted information flow to protect system operation even over public network segments.

Remote update of software to every level of the system, keeping all components up-to-date.

Easy-to-configure panel architecture combining access control input and output modules.

Powerful predefined and ad-hoc reports delivered from the integrated ODBC-compliant embedded database.

Alerts delivered via e-mail, and even cell phones.

Totally solid state construction for years of trouble-free service.

Lower long-term cost of ownership.

UL & ULC 294 Listed.
Designed for Easy Set-up and Support

The network architecture and browser interface of eMerge allow 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 on-site to the installation. And because eMerge has the software embedded in the system, it can be pre-programmed before installation or remotely programmed after installation.

Comprehensive Embedded Help File

The eMerge system contains a large, context sensitive help file that includes detailed information about all system features and functions with step-by-step setup instructions. Each help topic displays highlighted links to other related help file items.

Remote Service

eMerge’s network architecture allows remote service and software updates from any browser, anywhere.

Easy Network Set-Up

IT managers are comfortable with eMerge because it’s designed to work in their environment. A few pieces of information are all that are needed to put eMerge into action.

Visual System Map

eMerge’s system components are automatically identified and graphically displayed for easy reference and fast troubleshooting.
## System Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>eMerge 50</th>
<th>eMerge 5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access control readers</td>
<td>32</td>
<td>140</td>
</tr>
<tr>
<td>Maximum number of cameras</td>
<td>N/A</td>
<td>128</td>
</tr>
<tr>
<td>Maximum number of card holders</td>
<td>5,000</td>
<td>20,000</td>
</tr>
<tr>
<td>User photo</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>e-mail and SMS</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>NAS back-up</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Burg interface (loops)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Video Management System (VMS)</td>
<td>No</td>
<td>Optional</td>
</tr>
<tr>
<td>Enterprise capable</td>
<td>Optional</td>
<td>Yes</td>
</tr>
<tr>
<td>Live Monitoring Bundle</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>- Monitoring desktop, Floor plans,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Alarm acknowledgement, Photo pop-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Badging</td>
<td>No</td>
<td>Optional</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>Application Programmable Interface (API)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### eMerge Modules:

- **eMerge 50**
  - Network Controller – 1 Access Control Module, power supply and enclosure
- **eMerge 5000**
  - Network Controller – 1 Access Control Module, power supply and enclosure
- **eMerge EXN**
  - Expansion Node – card, power supply, and enclosure
- **eMerge MicroNode**
  - Compact Expansion Node – for Version 3 and later systems
- **eMerge ACM**
  - Access Control Module – 2 readers, 4 inputs, 4 outputs
- **eMerge INP**
  - Supervised Input Module – 8 inputs
- **eMerge OUT**
  - Relay Output Module – 8 outputs
- **eMerge TMP**
  - Temperature Input Module – 8 inputs

### Hardware and Software Specifications

Check with Linear’s Web site (www.linearcorp.com) for updated specifications, lists of supported devices, and software updates.

- **Readers**: The eMerge Access Control Module (ACM) supports card readers that use the Wiegand Reader Interface.
- **Operating System**: Red Hat Linux
- **Database Engine**: PostgreSQL (ODBC Compliant, API Enabled)
- **DBMS compatibility**: SQL, ODBC
- **e-mail support**: POP, SMTP
- **Encryption**: SSL, SHA-1
- **Network**: NTP, TCP/IP
- **Web**: http, https, xml
- **Processor**: Intel XScale-Intel 425
- **Memory**: CompactFlash (CF) 2 GB

### Readers, Keypads, and Accessories

Linear manufactures and supplies a complete range of proximity readers, keypads, power supplies, cards, and access credentials to complete your eMerge system. Visit www.linearcorp.com to view the latest available options.

### Part Number Cross Reference

Several eMerge parts changed part numbers with the Version 3 product release. See below for part number reference.

<table>
<thead>
<tr>
<th>Old P/N</th>
<th>New P/N</th>
<th>Systems &amp; Nodes</th>
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</thead>
<tbody>
<tr>
<td>0587001</td>
<td>230219</td>
<td>eMerge 50 System v3.3</td>
</tr>
<tr>
<td>0589001</td>
<td>230227</td>
<td>eMerge 50 System 110V v3.3</td>
</tr>
<tr>
<td>0587003</td>
<td>230220</td>
<td>eMerge 5000 System v3.3</td>
</tr>
<tr>
<td>0589003</td>
<td>230228</td>
<td>eMerge 5000 System 110V v3.3</td>
</tr>
<tr>
<td>0587004</td>
<td>230221</td>
<td>eMerge Expansion Node (EXN) v3.3</td>
</tr>
<tr>
<td>N/A</td>
<td>230229</td>
<td>eMerge Expansion Node (EXN) 110V v3.3</td>
</tr>
<tr>
<td>N/A</td>
<td>230222</td>
<td>eMerge MicroNode</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Old P/N</th>
<th>New P/N</th>
<th>Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>0580100-L</td>
<td>same</td>
<td>eMerge Access Control Module (ACM)</td>
</tr>
<tr>
<td>0580110</td>
<td>same</td>
<td>eMerge Supervised Input Module (INP)</td>
</tr>
<tr>
<td>0580120</td>
<td>same</td>
<td>eMerge Relay Output Module (OUT)</td>
</tr>
<tr>
<td>0580130</td>
<td>same</td>
<td>eMerge Temperature Input Module (TMP)</td>
</tr>
<tr>
<td>0587008</td>
<td>230338</td>
<td>eMerge Combo Board v3.3</td>
</tr>
</tbody>
</table>
About Linear’s IEI Brand

By addressing the demand for modern security and controlled access environments, Linear has tailored products that meet the requirements of an Internet-savvy and technology-driven marketplace. Central to Linear’s philosophy is the belief that the market requires innovative access control solutions for a changing, demanding world.

In addition to the eMerge Browser Managed Security Platform, Linear produces and markets the IEI Brand of standalone access control systems and keypads, as well as access control locksets, network-based access control systems, and mobile fleet management systems. The company markets these products to the leading industry distribution, installation and vertical end-user companies worldwide.

For more information about Linear’s IEI Brand, visit our Web site at:

www.linearcorp.com