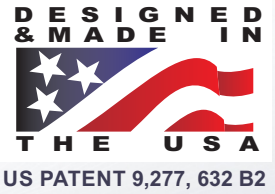


Emergency Lighting with

MARS[®]

Monitoring & Reporting System

LIGHT YEARS AHEAD



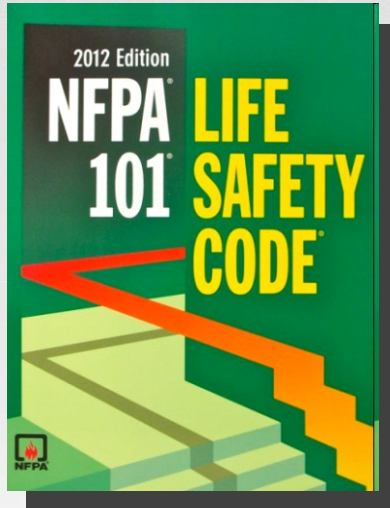
Signtex Inc
LIGHTING

INTELLIGENT EMERGENCY LIGHTING SYSTEMS

Emergency Lighting

The High Cost of Code Compliance

The Life Safety Code



The Code requires that a 30-second test must be conducted every month and a 90-minute test every year on **ALL** emergency fixtures and exit signs.

Written Reports

Written documentation of the test results is required, to be available on demand by local inspectors. Non-compliance can result in injury to occupants, building damage, and ultimately fines or facility closures.

High Costs

These requirements are labor intensive, especially in larger buildings which require many hours to inspect every emergency light, every month and every year.



Unit Equipment System (Battery Packs)

Average Battery life is 4-6 yrs. Removal and replacement of most battery packs is required after this time to maintain compliance with the Life Safety Code.

A larger building like a high school can contain more than 1,000 battery packs.

Due to the high costs of testing and battery replacement, many users fail to comply with mandated provisions of the Code.

The Sigtex Solution



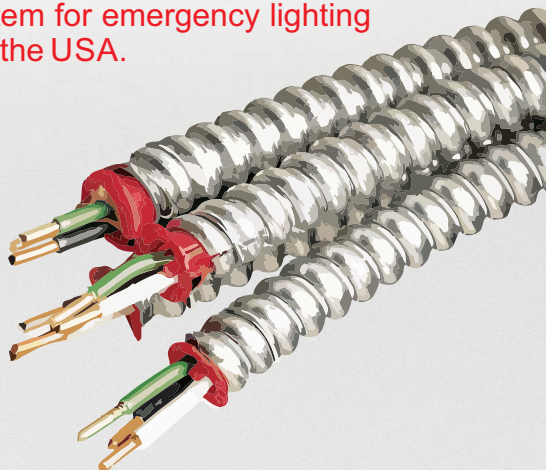
Central Battery Systems

Solves the problem of battery maintenance

Lower initial purchase and maintenance costs than inverter systems.

Low voltage wiring with DC power ensures all LED fixtures operate at peak efficiency.

The award-winning and patented MARS™ product (Page 4) is the most efficient management system for emergency lighting ever introduced in the USA.



Battery Maintenance

Compared to fixtures with self-contained battery packs, CB systems can reduce the number of batteries in any building by more than 100 times, and battery can be accessed without the use of ladders or special equipment.

Standard Batteries

Standard sealed lead acid (SLA) batteries can be purchased from stock at any commercial battery distributor.

The Central Battery Is Compact

When mounted at shoulder height, allows instant access to batteries without the use of ladders or special tools. Batteries supplying emergency power for 100 fixtures can be removed and replaced in minutes.

The MARS® System

Is the most advanced and cost-effective system for emergency lighting in any building. See next page...

Low Voltage Wiring

Simplified installation at lower cost. Low voltage emergency circuits allow the use of flexible metal cable routed on J-hooks.

Certifications

All systems and components are certified to UL Standard 924 and performance complies with NFPA Life Safety Code 101 and NEC 70.

Central Battery with MARS® Automatic Monitoring &

Why Choose MARS?

Automatic Fault Reports

System monitors the status of all four tests mandated by the Life Safety Code at least once every 28 days: BATTERY, CHARGER, LOAD & TRANSFER RELAY. If a failure is detected, an email is generated and sent immediately to the facility manager or a contract maintenance service, identifying the location, with a precise description of the fault.

Two Way Data Transfer

Ethernet cable or optional wireless data transfer links every Central Battery System via Internet to any personal computer to allow the user access to operating data, fault reports and test results for multiple fixtures. Manual tests can also be conducted through any computer on the network.

Printed Test Reports

Available automatically or on demand from the master PC or laptop.

Cloud Integration System (CIS)

Advanced software integrates test data from an unlimited number of central battery (CB) panels, allowing multiple buildings to be monitored from a single location. A Customer System Dashboard monitors real-time status of each CB panel and automatically sends fault data by email without action by the user, to provide written reports mandated by the Life Safety Code. The Cloud-Based Web portal is accessible from any authorized device connected to the internet.

Security

CBM firmware is well designed on a LINUX platform. MARS is a secure, data-base driven application and the web framework is designed to avoid cross-scripting and SQL injection attacks, the most common ways that a web system can be breached. In routine operations, the MARS system only sends Emails and does not support any external connection, so unauthorized access is limited. External connection only supported via SSH (Secure Shell) for maintenance operations. In the CIS Option above, AWS Cognito authentication provides secure user login, password management, and access control.

Two- Data T



Automatic Self-T Automatic Fault Automatic Compliance Lowest Possible Operatio Unlimited Fixtu

- way
transfer



Test Diagnostics
reports by email
with Life Safety Code
& Maintenance Costs
& Buildings

Features & Benefits

Total Control

Manage complex emergency lighting installations, including all testing and reports mandated by the Life Safety Code, at lower total cost than any other system.

Instant Notification

Immediate automatic notification of any fault in the system to maintenance personnel, or maintenance service contractors.

Compliance Made Easy

Ensures full compliance with all applicable building safety codes, including required written reports.

No Site Visits

Continuous monitoring and automatic reports ensures maintenance personnel are not required to visit fixture and battery locations in buildings until the need arises, as reported by the system email.

Labor Saving

Identification of the precise location and type of fault ensures the most efficient possible use of total time on the job.

Certifications

All systems and components are certified to UL Standard 924 and performance complies with NFPA Life Safety Code 101 and NEC 70.

Computer Controlled Self- Test Diagnostics

Control

The four emergency lighting functions defined in NFPA Life Safety Code 101 and UL Standard 924 for Emergency and Power Equipment are tested as follows:

Battery Condition

Every 28 days or sooner if desired, batteries are tested for voltage and discharge rate: Every 12 months, batteries are discharged under full load to confirm minimum of 87.5% of rated voltage after 90 minute discharge. If required, discharge and test timing parameters can be changed.

Automatic Transfer Switch

Every 28 days or sooner if desired, the ATS is tested to ensure full load transfer after any loss of AC building utility power.

Battery Charger Function

Every 28 days or sooner if desired, the charger is tested for correct charge rate and voltage.

Connected Emergency Load

Every 28 days or sooner if desired.

Battery Panel Power Range

Four models are available to supply 100, 250, 500 or 1,000 Watts of emergency power for 90 minutes at 24 VDC.

DATA DISPLAY SHOWS COMPLETE SYSTEM STATUS AND DIAGNOSTICS

2 ON BOARD COMPUTERS MONITOR DATA AND INTERNET COMMUNICATIONS

ETHERNET CONNECTION

STANDARD SLA 12V BATTERIES

CONTINUOUS POWER FOR UP TO 40 EXIT SIGNS

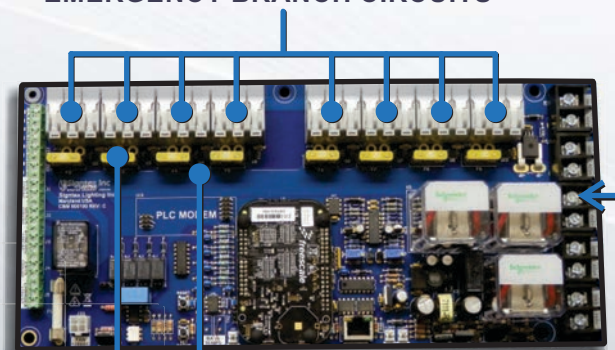
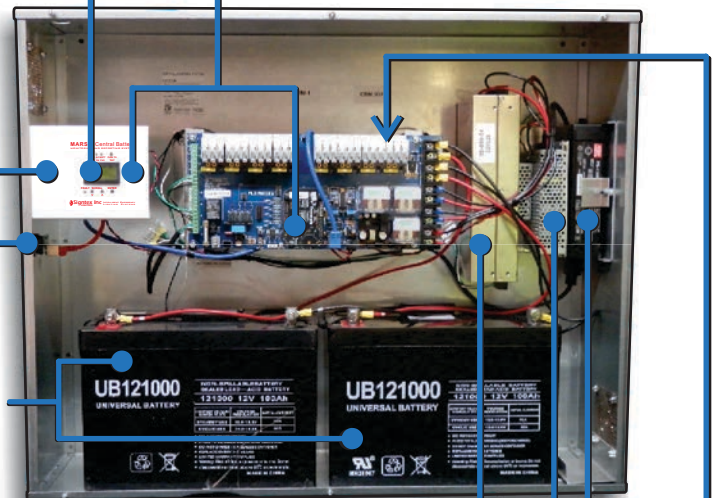
STANDBY POWER SUPPLY FOR NIGHT OR SECURITY LIGHTING

FAST CHARGER COMPLETES RECHARGE IN LESS THAN 12 HRS

FAST CLIP TERMINALS FOR EIGHT EMERGENCY BRANCH CIRCUITS

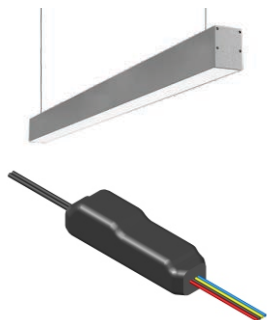
FLAT PIN FUSES FOR EACH BRANCH CIRCUIT

CURRENT SENSORS MONITOR CONNECTED LOADS



Emergency Lighting Control (ELC) for LED Luminaires

LINEAR OR STRIP



P1 : Emergency Power
5- 20W

TROFFER



P2 : Emergency Power
5- 20W

WALL PACK



P3 : Emergency Power
5- 20W

DOWN LIGHT

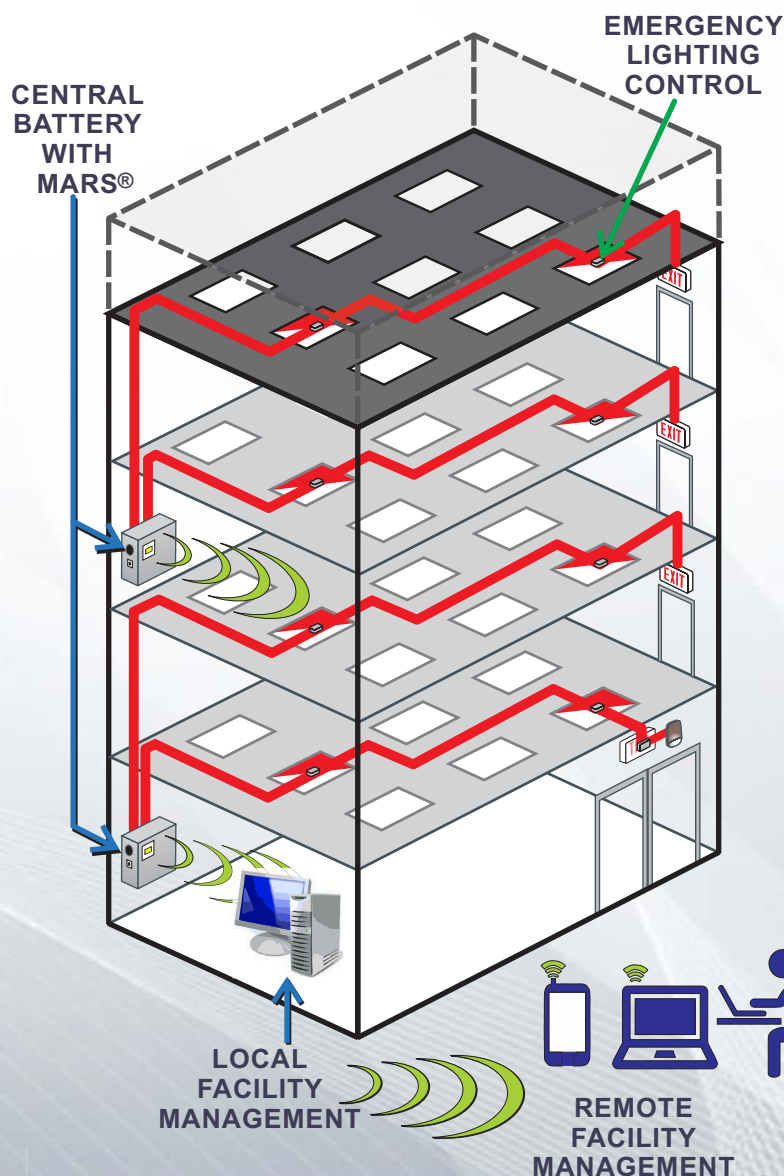


P6 : Emergency Power
5- 20W

HIGH BAY



P7 : Emergency Power
10- 60W



Universal Applications

ELC models are available in a wide range of power, voltage and current settings to operate any LED luminaire at the precise lumen output required for emergency lighting.

MARS®

Installations with MARS (Monitoring And Reporting System) allow internet communication between all fixtures and battery systems and deliver automatic fault reports via email to any address.

Compatible

Compatible with all types of dimming and lighting controls.

Fully Automatic Self- Test

Fully automatic self-test, self-diagnostics is standard for all systems.

Central Batteries

Central batteries allow efficient & easy maintenance that ensures compliance with the Life Safety Code and reduces number of batteries per building by more than 200:1 compared to unit equipment.

Light Years Ahead

Surprise Gateway CC Training Center Surprise, AZ



Low voltage circuit layout and IES photometrics
Supplied by Signtex Lighting Inc



INTELLIGENT EMERGENCY LIGHTING SYSTEMS

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