EMERGENCY LIGHTING TESTING AND MONITORING SYSTEM

UL LISTED

INTERFACE

REPEATER

SENSOR ON TEST

SENSOR ON TEST

EMERGENCY LIGHTING TESTING & MONITORING SYSTEM

Panel State: Normal   09 / 16 Monday : 24:00

POWER   FAULT   BATT OPR   DISABLE

EM. MODE   TEST   BATT TEST   MUTE

EM. MODE   RESET   WAKE   MUTE

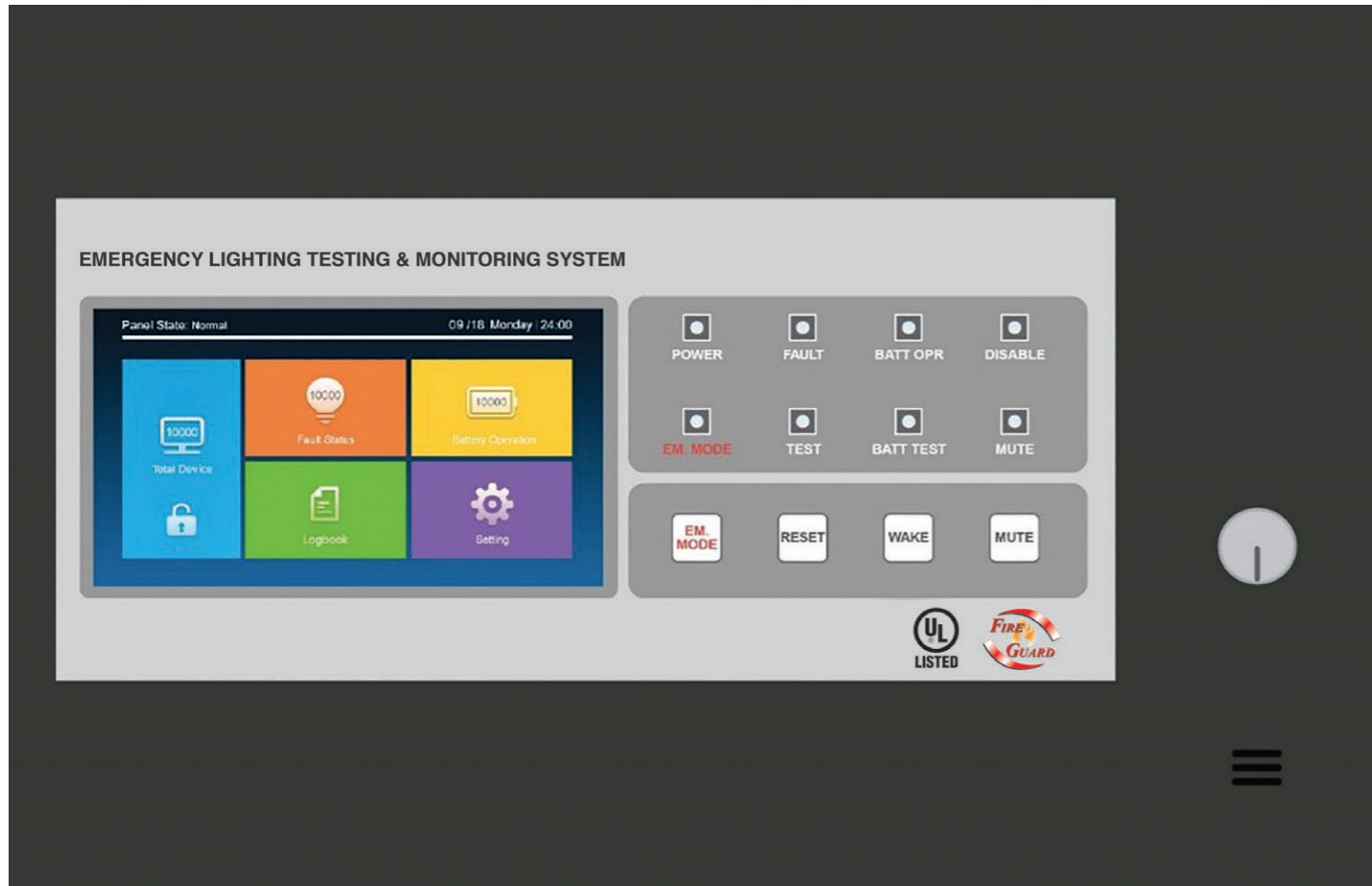EXIT

EXIT

FIREGUARD GLOBAL LTD.

Tel: 00-44-8450751042 · Fax: 00-44-8459751043
Email: Info@Fireguard-Uk.com · www.fireguard-Uk.com

Unit 11 · Chancel Industrial Estate · Newhall Street
Willenhall · WV13 1NX · United Kingdom

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FM APPROVED

CE

EMERGENCY LIGHTING TESTING AND **MONITORING SYSTEM**

EMERGENCY LIGHTING TESTING & MONITORING SYSTEM

Panel State: Normal   09 /18. Monday | 24:00

Total Device   Fault Status   Battery Operation

Logbook   Setting

POWER   FAULT   BATT OPR   DISABLE

EM. MODE   TEST   BATT TEST   MUTE

EM. MODE   RESET   WAKE   MUTE

UL LISTED   FIRE GUARD

INTRODUCTION:

The emergency lighting testing and monitoring system is designed to test, maintain and manage independent powering emergency lights. Capable of automatic testing, data analysis and result judgment, this system improves the maintainability of emergency lights, thus increasing their reliability.

FEATURES:

- The Emergency Lighting Monitoring Control Panel has a 7-inch colorful touch screen, offering excellent man-machine interaction experience.
- Controlled by sound and light, the integrated controller automatically conducts real-time and efficient testing and inspection of operating states and faults of emergency lights. Events will be recorded and history can be retrieved.
- Logs can be displayed. History events can be viewed on the screen and imported into the computer.
- Timed automatic testing, which can test lights emergency functions according to the set time period.

- Timed battery maintenance, which can charge and discharge batteries according to the set time period so as to prolong the battery life.
- Emergency Lighting Monitoring Control Panel and interfaces are connected by CAN bus(The communication distance is up to 1Km). The interface and its subordinate devices are connected by RS485 bus (The communication distance is up to 1Km). The layout is simple and the cost is low.
- Maximum 64 interfaces within a Emergency Lighting Monitoring Control Panel, with each interface connecting up to 254 devices, Up to 16,320 devices can be managed simultaneously.

- The emergency lighting central monitoring panel provides three relay output interfaces (The device fault, the monitoring panel is disconnected from the power supply, The device is disconnected from the power supply), which can be applied by customers according to field requirements.
- The emergency lighting central monitoring panel can receive the external fire alarm signal or manually

DISTRIBUTED CONTROLLER (INTERFACE)- UL LISTED NO.E345524

It is responsible for information transfer within a certain area, thus increasing the number of subordinate devices and facilitating data.

Model:	FG-INT01
Voltage	AC120V/0.035A or AC277/0.016A 50/60Hz
AC Power	3W
Battery	Ni-MH - AA 600MAH/4.8V
Emergency Duration	3Hours
Communication BUS	CAN BUS AND 485 BUS

INTERFACE

CORRESPONDING CONTROLLER (REPEATER)- UL LISTED NO E345524

It is responsible for information transfer within a certain area, thus increasing the number of subordinate devices and facilitating data.

Model:	FG-REP01
Voltage	AC120V/0.035A or AC277/0.016A 50/60Hz
AC Power	3W
Battery	Ni-MH - AA 600MAH/4.8V
Emergency Duration	3Hours
Communication BUS	485 BUS

REPEATER

ADDRESSABLE EMERGENCY LIGHTS UL LISTEDNO.E345524

Model:	FG-T632L / FG-T604L
Voltage	AC120V/0.05A or AC2277/0.025A 50/60Hz
AC Power	5.5W
Battery	Ni-MH SC 2200MAH/4.8V
Emergency Duration	3Hours
LED	20pcs SMD2835
Communication BUS	485 BUS

FG-T632L

FG-T604L

BULKHEAD EMERGENCY LIGHT

Model:	FG-T603L
Voltage	85-265VAC 50/60Hz
AC Power	2W
Battery	Ni-MH - SC 4.8V / 2200MAH
Emergency Duration	≥ 3Hours
LED	20 pcs SMD2835
Lumen	>250LM
Color	White

BULKHEAD EMERGENCY LIGHT

Model:	FG-T605L
Voltage	85-265VAC 50/60Hz
AC Power	2W
Battery	Ni-MH - SC 4.8V / 2200MAH
Emergency Duration	≥ 3Hours
LED	1 pc SMD 3W
Lumen	>310LM
Color	White

UL LISTED

EMERGENCY LIGHTING TESTING AND **MONITORING SYSTEM**

ADDRESSABLE EMERGENCY EXIT SIGN

Model:	FG-T741R/G
Input Voltage	AC120V/0.038A or AC277/0.018A 50/60Hz
AC Power	3.5W
Battery	Ni-MH Battery: AA 600MAH/4.8V
Emergency Duration	3Hours
LED	8 pcs Φ5 Red or Green
Communication BUS	485 BUS
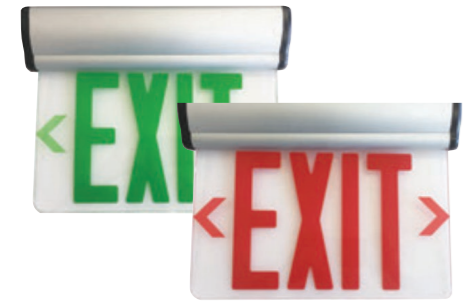
ADDRESSABLE EMERGENCY EXIT SIGN

Model:	FG-T740R/G
Input Voltage	AC120V/0.038A or AC277/0.018A 50/60Hz
AC Power	3.5W
Battery	Ni-MH Battery: AA 600MAH/4.8V
Emergency Duration	3Hours
LED	12pcsΦ5RedorGreen
Communication BUS	485 BUS

FG-T705 ▼

ADDRESSABLE EMERGENCY EXIT SIGN

Model:	FG-T705
Input Voltage	AC120V/0.038A or AC277/0.018A 50/60Hz
AC Power	3.5W
Battery	Ni-MH Battery: AA 600MAH/4.8V
Emergency Duration	3Hours
LED	14 pcs SMD2835
Communication BUS	485 BUS

FG-T708 ▲

ADDRESSABLE EMERGENCY EXIT SIGN
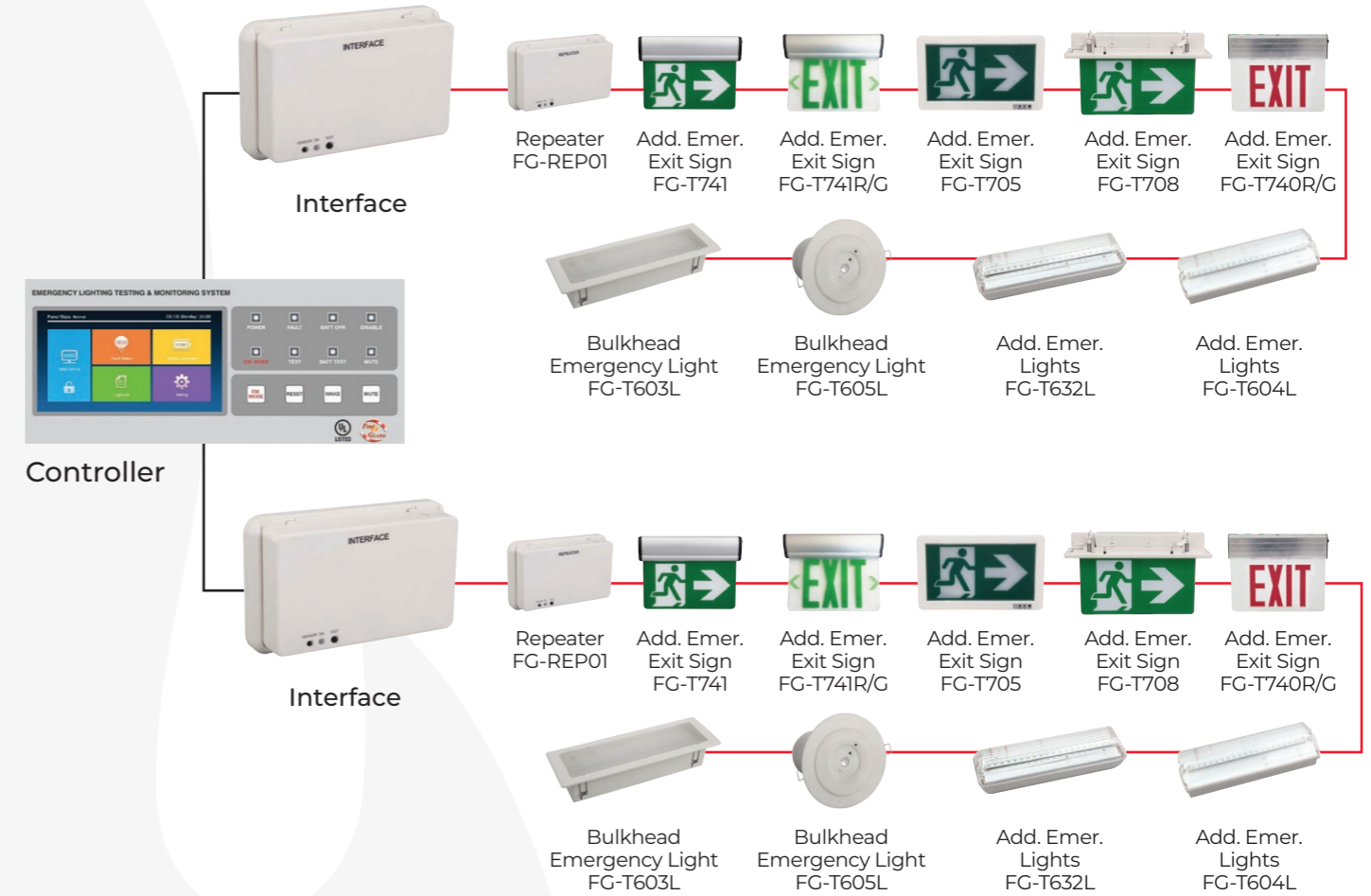
Model:	FG-T741
Input Voltage	AC120V/0.038A or AC277/0.018A 50/60Hz
AC Power	3.5W
Battery	Ni-MH Battery: AA 600MAH/4.8V
Emergency Duration	3Hours
LED	14 pcs SMD2835
Communication BUS	485 BUS

ADDRESSABLE EMERGENCY EXIT SIGN

Model:	FG-T708
Input Voltage	AC120V/0.038A or AC277/0.018A 50/60Hz
AC Power	3.5W
Battery	Ni-MH Battery: AA 600MAH/4.8V
Emergency Duration	3Hours
LED	14 pcs SMD2835
Communication BUS	485 BUS

2. COMPONENTS

Controller

Interface

| Repeater FG-REP01 | Add. Emer. Exit Sign FG-T741 | Add. Emer. Exit Sign FG-T741R/G | Add. Emer. Exit Sign FG-T705 | Add. Emer. Exit Sign FG-T708 | Add. Emer. Exit Sign FG-T740R/G |

| Bulkhead Emergency Light FG-T603L | Bulkhead Emergency Light FG-T605L | Add. Emer. Lights FG-T632L | Add. Emer. Lights FG-T604L |

Interface

| Repeater FG-REP01 | Add. Emer. Exit Sign FG-T741 | Add. Emer. Exit Sign FG-T741R/G | Add. Emer. Exit Sign FG-T705 | Add. Emer. Exit Sign FG-T708 | Add. Emer. Exit Sign FG-T740R/G |

| Bulkhead Emergency Light FG-T603L | Bulkhead Emergency Light FG-T605L | Add. Emer. Lights FG-T632L | Add. Emer. Lights FG-T604L |

The area controller uses CAN bus to communicate with interfaces, which communicate with fire emergency lights by 485 bus. Another repeater will be added to increase the communication distance when devices are too far from the interface.
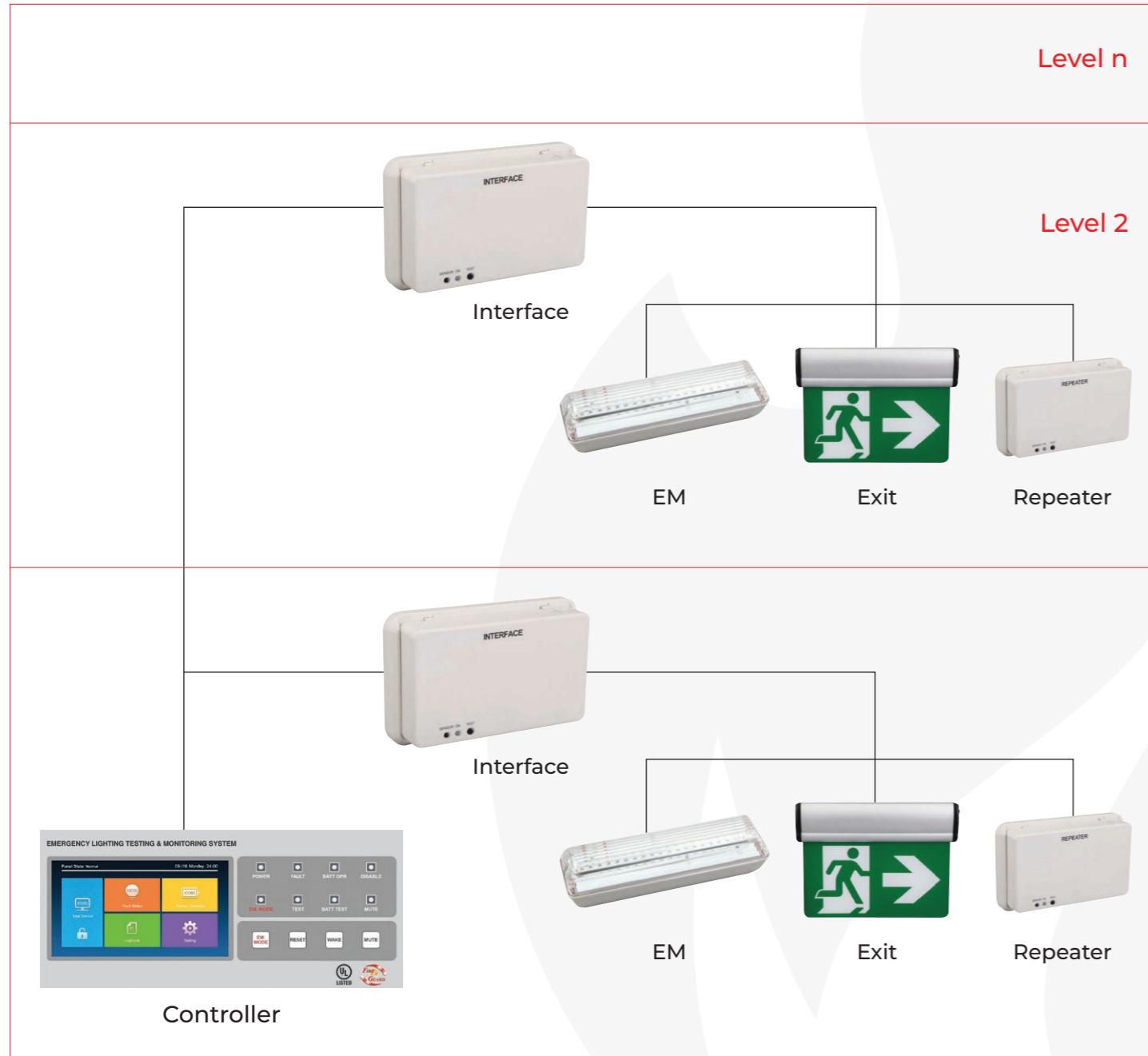
Devices	Functions
Area Controller	As the brain of this system, it gathers and processes information and automatically controls subordinate devices to test and maintain themselves. It will warn users by the screen, LED and the buzzer when accidents occur. With a user-friendly man-machine interaction interface, it can maximally free users.
Interface	As an extension of the area controller, it is responsible for information transfer within a certain area, thus increasing the number of subordinate devices and facilitating data processing and management.
Repeater	It can lengthen the communication distance between two devices, and increase bus entries.
Emergency light	It is automatically on in times of emergency to ensure lighting. It will report its faults and prompt a warning using its own LED.
Exit indicator	It is constantly on to provide indications, and will report its faults and prompt a warning using its own LED.

3. SYSTEM TYPES

Installation and connecting methods should be chosen according to different scales, roughly, small-scale, large-scale and remote systems. A small-scale system regards a single building as a unit; a large-scale system covers a wider area, such as a large supermarket and a shopping mall; a remote system regards an area with multiply buildings as a unit. Users can choose system types accordingly.
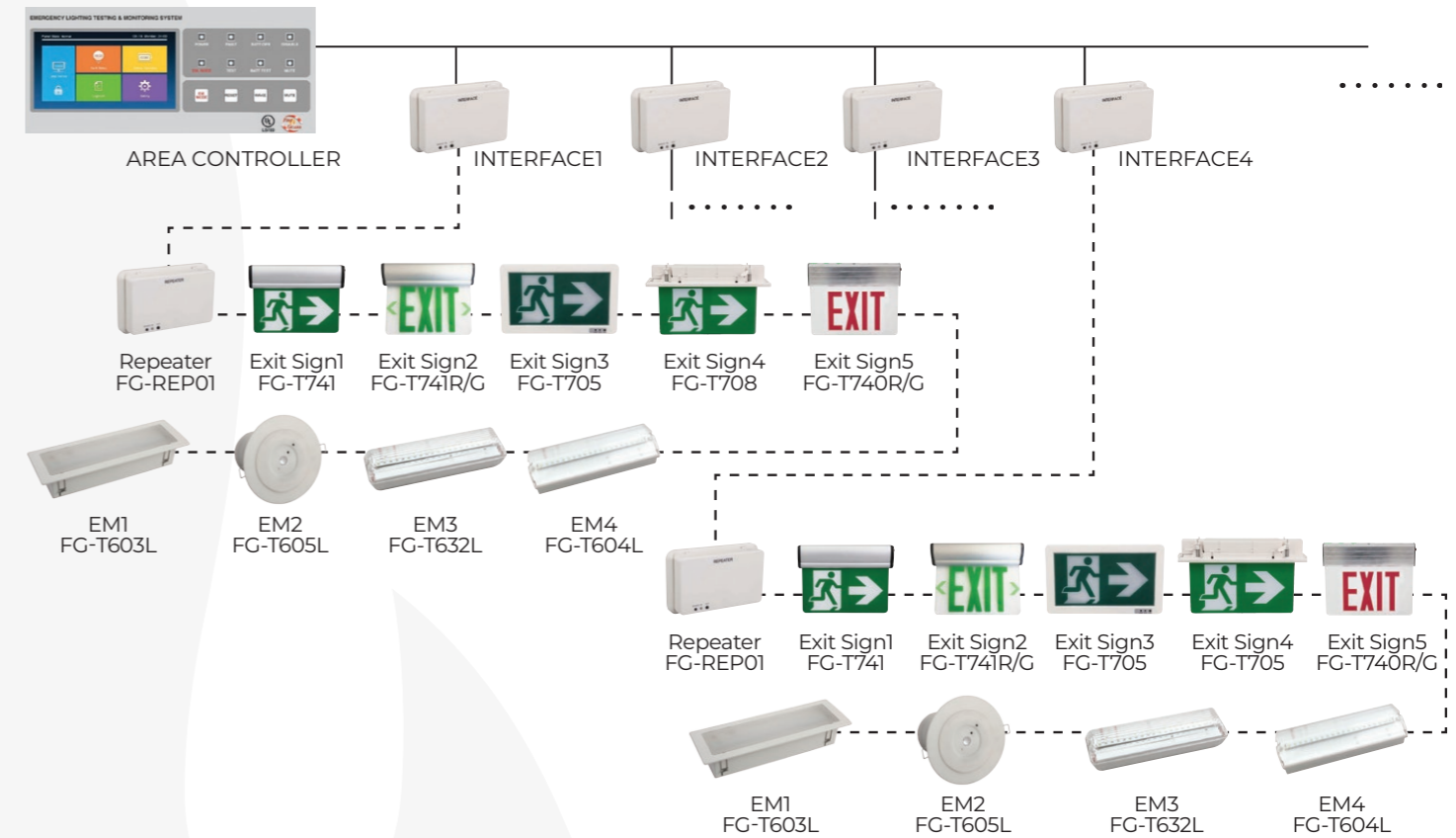
3.1 SMALL-SCALE APPLICATION SYSTEM:

Level n

Level 2

Interface

EM   Exit   Repeater

Interface

EMERGENCY LIGHTING TESTING & MONITORING SYSTEM

Controller

EM   Exit   Repeater

ATTENTIONS:

1. Emergency light address and other light address under a certain interface can be randomly selected as long as they are different from one another, but the address value should be below 254.
2. Fire emergency light addresses under different interfaces are independent from each other, thus can overlap.
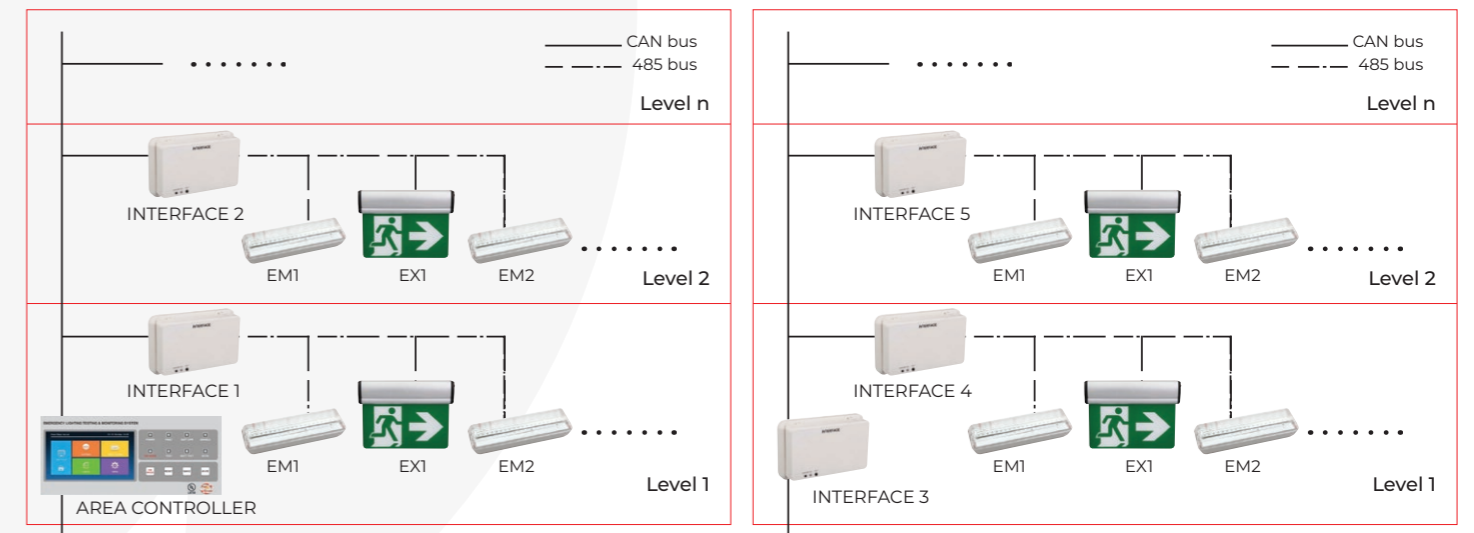
3.2 LARGE-SCALE APPLICATION SYSTEM:

AREA CONTROLLER   INTERFACE1   INTERFACE2   INTERFACE3   INTERFACE4

Repeater   Exit Sign1   Exit Sign2   Exit Sign3   Exit Sign4   Exit Sign5
FG-REP01   FG-T741   FG-T741R/G   FG-T705   FG-T708   FG-T740R/G

EM1   EM2   EM3   EM4
FG-T603L   FG-T605L   FG-T632L   FG-T604L

Repeater   Exit Sign1   Exit Sign2   Exit Sign3   Exit Sign4   Exit Sign5
FG-REP01   FG-T741   FG-T741R/G   FG-T705   FG-T705   FG-T740R/G

EM1   EM2   EM3   EM4
FG-T603L   FG-T605L   FG-T632L   FG-T604L

ATTENTIONS:

1. A repeater should be added to increase 485 communication distance or entries be added in the same 485 bus because a large-scale system covers so wide an area that communication signals cannot reach certain distances.
2. Each repeater occupies one of 254 addresses allocable in one interface, thus should be different from any fire emergency light address under the same interface.

3.3 REMOTE APPLICATION SYSTEM

—— CAN bus
—·— 485 bus
Level n

INTERFACE 2

EM1   EX1   EM2
Level 2

INTERFACE 1

EM1   EX1   EM2
Level 1

AREA CONTROLLER

—— CAN bus
—·— 485 bus
Level n

INTERFACE 5

EM1   EX1   EM2
Level 2

INTERFACE 4

EM1   EX1   EM2
Level 1

INTERFACE 3

ENHANCED SYSTEM USING REPEATER INTERFACE:

A repeater should be added to increase 485 communication distance or entries be added in the same 485 bus because a large-scale system covers so wide an area that communication signals cannot reach certain distances.
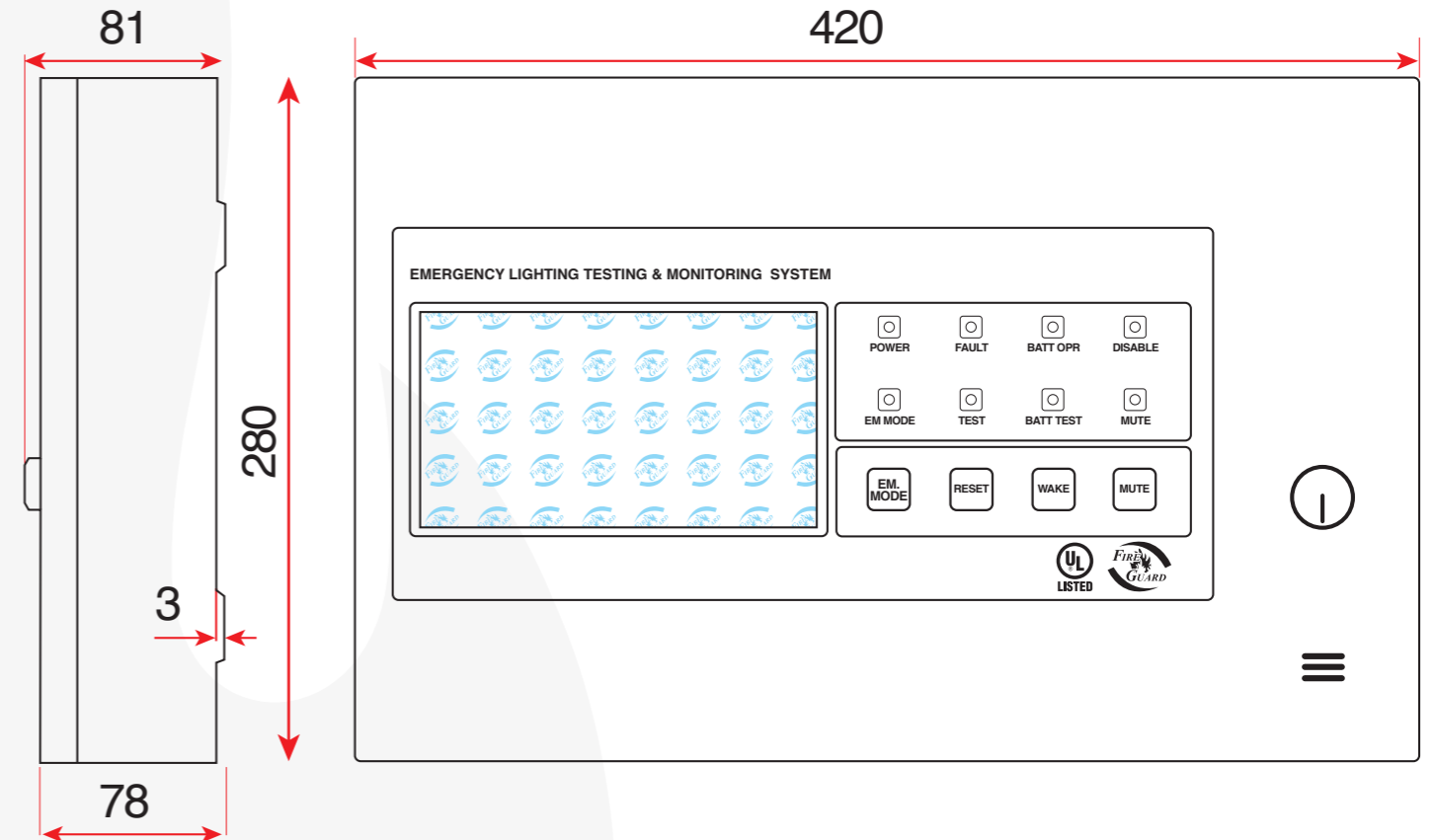
Each repeater occupies one of 254 addresses allocable in one interface, thus should be different from any fire emergency light address under the same interface.

A interface should be added to increase the communication distance because the area controller is so distant from interfaces that communication signals cannot reach certain areas. In order to distinguish this interface's function from that of other interfaces, it is signaled as a repeater, but its nature as an interface shall not change.

Control Unit and Addressable Emergency Light and Accessories Selection:

Model	Description	Listing	Voltage	Specification
FG-101	Central Monitoring Panel (including remote controller)	UL	Input Voltage AC100-240V 50/60Hz AC Power: 10W Lead-acid Battery: 2* 1.4AH/12V Emergency Duration: 3Hours	Anti-rusting metal case 7-inch colorful touch screen can connect max.64 interfaces
FG-Rep01	Interface	UL	AC120V/0.035A or AC277/0.016A	Interface, an extension of the area controller, transfer information.
FG-T705	Addressable Exit Sign	UL	Battery: Ni-MH SC 2200MAH/4.8V Emergency Duration:3Hours.	Addressable, self-contained battery-AC Power 3.5W
FG-T604L	Addressable Emergency Light	UL	Battery: Ni-MH SC 2200MAH/4.8V Emergency Duration:3Hours.	Addressable, self-contained battery-AC Power 5.5 W
FG-T741G/RT 741 Running man	Addressable Emergency Light	UL	Battery: Ni-MH AA 600MAH/4.8V Emergency Duration: 3Hour, Celling/Wall/Side	Addressable, self-contained battery AC Power: 3.5W
FG-T740G/R	Addressable Exit Sign	UL	Battery: Ni-MH AA 600MAH/4.8V Emergency Duration: 3Hour. Celling/Wall/Side Mounting	Addressable, self-contained battery. AC Power: 3.5W
FG-T705	Addressable Exit Sign	UL	Battery: Ni-MH AA 600MAH/4.8V Emergency Duration: 3Hour	Addressable, self-contained battery AC Power: 3.5W
FG-T708	Addressable Exit Sign	UL	Battery: Ni-MH AA 600MAH/4.8V Emergency Duration: 3Hour. Unit price for 1 graphic only, available graphics for option	Addressable, self-contained battery AC power :3.5W
FG-T603L	Bulkhead Emergency Light	UL	Voltage 85-265VAC 50/60Hz Battery Ni-MH - SC 4.8V / 2200MAH Duration ≥ 3Hours Lumen >250LM LED 20 pcs SMD2835	Addressable, self-contained battery AC power :2W
FG-T605L	Bulkhead Emergency Light	UL	Voltage 85-265VAC 50/60Hz Battery Ni-MH - SC 4.8V / 2200MAH Duration ≥ 3Hours Lumen >310LM LED 1 pcs SMD 3W	Addressable, self-contained battery AC power :2W

DIMENSION REFERENCE:

EMERGENCY LIGHTING TESTING & MONITORING SYSTEM

POWER   FAULT   BATT OPR   DISABLE
EM MODE   TEST   BATT TEST   MUTE

EM. MODE   RESET   WAKE   MUTE

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