

# EXIT-LUME-SUS

ITEM NO. 34754

## Features

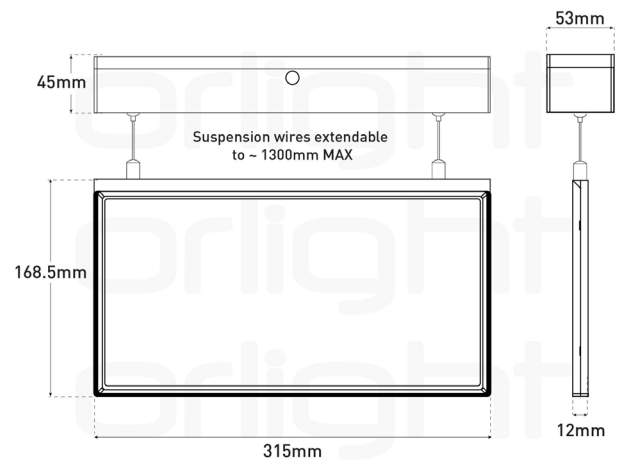
- For LED module with a forward voltage of 12-14Vdc/9-12Vdc
- Complete set with integrated electronics, LED module, housing, and battery
- Plug-in Lithium Iron Phosphate battery
- SELV for output voltage
- Very low stand-by power loss
- Polycarbonate white RAL 9016
- 850°C Glow-wiring

## Functions

- Maintained and non-maintained mode
- Standard function and self-test function
- Self testing products can switch the self testing, standard function through the dial switch



## Dimension



## Technical Specification

|                                        |             |
|----------------------------------------|-------------|
| Rated supply voltage                   | 220 - 240 V |
| AC voltage range                       | 140-180VAC  |
| Mains frequency                        | 50/60Hz     |
| Power factor                           | ≥0.5        |
| Starting time                          | 0.5S        |
| Ambient temperature ta                 | 5-45°C      |
| IP rating                              | IP20        |
| In-rush current                        | 1.5A        |
| In-rush current duration               | 1ms         |
| Mains surge capability (between L – N) | 1KV         |
| Emergency Lumens                       | 60LM        |
| Colour Temperature                     | 6000K       |

# EXIT-LUME-SUS

## Specific Technical Data

| Item Code                      | Typical output emergency power | Mains input current, min | Mains input current, max | Input power in mains operation, min | Input power in mains operation, max |
|--------------------------------|--------------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| EXIT-LUME-SUS (Maintained)     | 1W                             | 10mA                     | 30mA                     | 2W                                  | 4W                                  |
| EXIT-LUME-SUS (Non-maintained) |                                | 1mA                      | 20mA                     | 0.5W                                | 2.5W                                |

| Item Code     | LED module forward voltage range<br>Min-Typ-Max | LED module forward current range<br>Min-Typ-Max | LED module forward power range<br>Min-Typ-Max | Visual Distance | Maintained Non-maintained     | Self-test |
|---------------|-------------------------------------------------|-------------------------------------------------|-----------------------------------------------|-----------------|-------------------------------|-----------|
| EXIT-LUME-SUS | 12-13-14V                                       | 44-47-50mA                                      | 0.6-0.62-0.65W                                | 28m             | Maintained/<br>Non-maintained | ○         |

### Note:

1. All specifications are typical at 25°C unless otherwise stated.
2. All specifications are typical on the 230VAC unless otherwise stated.
3. ○ Means "No". ● Means "Yes".

## Technical/ Commissioning (self test)

### Functionality of the test button

1. A short press (>1s) on the button start a function test lasting 5 seconds (The battery's capacity should be more than 5%=charging 30mins)
2. Holding down the button(>10s) resets the timer(System-reset)

### Functionality test

The 5 second long, each 7 days' function test serves to check the functionality of the emergency unit, the batteries and LED module.

#### Notice.

-If a mains supply failure occurs while a function test is in progress, the test will be postponed and the system will enter emergency operation. Following restoration of the mains supply, a postponed functional test will re-commence automatically as soon as conditions permit.

### Duration test (Europe)

- First test: After 24 hours of AC mains power input, the emergency lighting unit will enter into a 3-hour duration test.
- Half year duration test: Conduct 3-hour duration test every 180-182 days to check the battery capacity.

#### Notice.

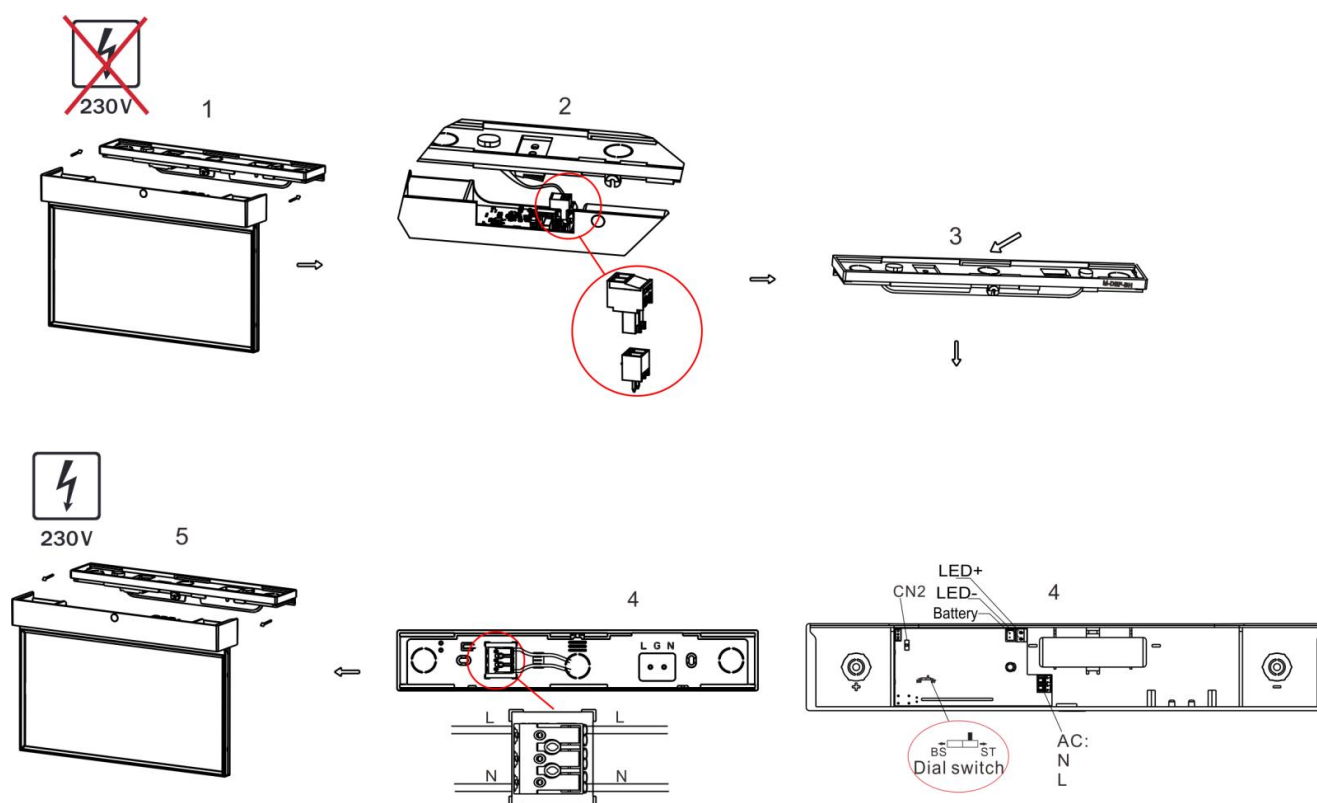
- A duration test shall only be started when the battery supply is fully charge if a mains supply failure occurs while a duration test is in progress, the test shall be postponed and the system shall enter emergency operation. Following restoration of the mains supply, a postponed duration test shall re-commence automatically when the battery supply is fully re-charge.
- The indicator will be slow flashing Green within 5 days if the duration test be carried out successfully.

# EXIT-LUME-SUS

Indicator LED System status is locally by a bi-color indicator LED.

| LED Indication                            | Status                   | Description                                                | <b>NOTICE</b><br>Fault status:<br>If an error is detected , the indicator LED will switch to RED. If the error has been corrected please re-connecting the battery after the mains power off, the indicator LED immediately will switch back to GREEN when mains power on .<br><br>Battery failed duration test:<br>After an exchange of the battery and holding down the button (>10S) reset the timer, the indicator LED will switch to GREEN.<br><br>If the temperture of battery is higher than 50°C or lower than 0°CV ,will show error an d stop charging |
|-------------------------------------------|--------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Permanent Green                           | Standby ,System OK       | Mains Operation, battery is charged                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Fast flashing Green (0.25s on 0.25s off ) | Function test underway   | Function test underway                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Slow flashing Green (1s on 1s off)        | Duration test underway   | Duration test underway                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Permanent Red                             | Lamp failure             | Open Circuit or Short circuit or LED failure               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Fast flashing Red (0.25s on 0.25s off )   | Battery capacity failure | Battery failed duration test                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Slow flashing Red (1s on 1s off)          | Battery fault            | Incorrect battery voltage or Short circuit or Open Circuit |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Green and Red off                         | Battery Operation        | Emergency mode: Mains disconnected or Mains failure        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Slow blinking red (1s on 3s off)          | Temperture error         | Battery temperture id higher than 50°C or lower than 0°C   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Wiring Diagram



## Wiring Diagram Continued

### Note:

- Step "1": Push out the upper cover according to diagram to open the product.  
 Step "2": Disconnect the AC cables from the terminal.  
 Step "3": Lead the AC cables through the inlet hole indicated in the diagram, then fix the upper cover to the ceiling.  
 Step "4": Connect the AC cables respectively to the positions marked on the AC terminal.  
 Step "5": After wiring, push the cover back according to the diagram to finish the installation.

### For CN2 connector:

1. Non-maintain mode: set short-circuit plug on CN2 connector.
2. Maintain mode: move the short-circuit plug away.

### Function switching:

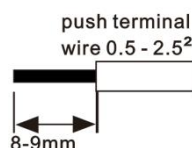
- Step 1: According to the diagram, switch the BS/ST function by the dial switch.  
 Step 2: Turn to the right and switch the function to self-test version (ST).  
 Step 3: Turn to the left and switch the function to standard version (BS).

### Note:

1. Please note that only the self-test version product can switch functions by the dial switch, which is not available for the standard version.
2. Please note that functions switching by dial switch would only be available when all the wiring is disconnected, including the AC input, DC output and the battery.

### Requirements for wiring wires:

1. Wire diameter range: 0.5-2.5 square meters;



## Battery Data

| Emergency power | Batteries               | Battery fully charged time | Charge Current | Battery discharge voltage<br>Min-Typ-Max | Battery discharge current<br>Min-Max | Battery output power<br>Min-Max | Emergency Duration |
|-----------------|-------------------------|----------------------------|----------------|------------------------------------------|--------------------------------------|---------------------------------|--------------------|
| 1W              | 3.2V 1500mAh<br>LiFePO4 | 24h                        | 200mA±10%      | 2.8-3.2-3.6V                             | 220-340mA                            | 0.8-1.2W                        | 3h                 |

### Note:

Automatic recharge when battery voltage falls below 3.4V. Charger off (0mA) when battery voltage exceeds 3.6 V. Battery protected against operation at excessive temperatures.  
 The emergency lighting LED driver will recharge the battery normally after running the test of 61347-2-7 CL22.3 (abnormal operating conditions).  
 When the voltage is below 2.0 V, the battery will not enter an emergency state.  
 The minimum charging environment temperature of the battery is 5°C, to ensure that the battery can be charged.

|                                  |               |
|----------------------------------|---------------|
| Capacity                         | 1.5 Ah        |
| International designation        | IFpR 18/65    |
| Battery voltage/cell             | 3.2V          |
| Cell type                        | 18650         |
| Case temperature range to ensure |               |
| 4 years design life              | +5°C to +55°C |
| 5 years design life              | +5°C to +45°C |

## Battery Data

|                                                                                           |                 |
|-------------------------------------------------------------------------------------------|-----------------|
| 6 years design life                                                                       | +5°C to +35°C   |
| Max. short term battery case temperature (shorter than 1 month over the battery lifetime) | IFpR 18/65      |
| Max. number discharge cycles                                                              | 50 cycles total |
| Max. storage time                                                                         | 6 months        |

### Notice: Storage condition

- Batteries should be stored within the specified temperature range in low humidity conditions.

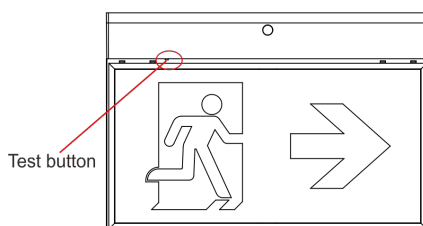
Optimal storage conditions are

- Temperature: -20°C to +40°C

- Humidity: 45% - 85%

- Avoid atmosphere with corrosive gas
- It is recommended to disconnect the battery before storage or delivery
- Battery should be charged every three months in order to keep its initial performance.

## Test Button



Test button:

When 220VAC is powered on, press this button, the standard product will enter an emergency state, the self test product will enter a functional test for 5 seconds, and the self test product will reset after holding for 10 seconds.

## Standards

This product meets the following standards:

- |                       |                    |            |
|-----------------------|--------------------|------------|
| • EN IEC60598-1       | • EN IEC61347-2-7  | • EN 62034 |
| • EN IEC60598-2-1     | • EN IEC61347-2-13 | • EN 55015 |
| • EN IEC60598-2-22    | • EN 61000-3-2     | • ROHS 2.0 |
| • ISO3864-Parts 1&3&4 | • EN 61000-3-3     |            |
| • EN IEC61347-1       | • EN 61547         |            |

## Service Life

Average life-time 50,000 hours under rated conditions with a failure rate of less than 10% for the emergency converter as rated power. Average failure rate of 0.2% per 1000 operating hours.

## Important

It is recommended that the unit is installed by a competent person ensuring the installation complies with the necessary standards. The company accepts no responsibility for incorrect installation, incorrect operation or improper maintenance. After installation of the fitting, the battery must be charged for 24 hours for duration test.