# Remote Emergency Pack for LED Luminaires
# YH25 Series Self-test

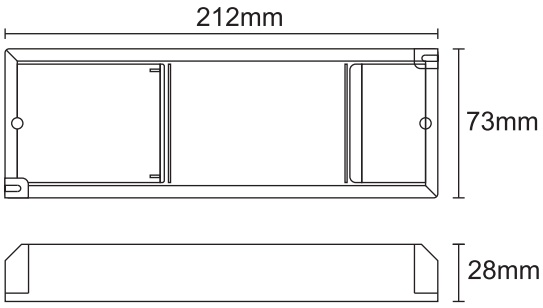
## Product description

- Self-test function.
- LED emergency converter that can transfer standard LED fitting into emergency LED fitting.
- Used with Lithium iron phosphate battery.
- Suits for LED fitting with external led driver.
- Accessary: test switch and charge indicator.

## Applications

- Use in damp and dry environment.
- For use on a wide range of LED fittings to convert them from standard to emergency fitting.
- LED fitting would be maintained emergency fitting if standard (main powered) driver, emergency lighting kit and battery are all retained in the circuit. LED fitting would be non-maintained emergency fitting if only emergency conversion module and battery are retained in the circuit.
- Additional Relay that can control standard LED driver.
- Deep discharge protection.
- Connector between emergency kit and battery has the function of polarity reversal protection.
- Ambient range ta 0....50℃
- IP20 protection, relies on end-product enclosure for protection against accidental contact live parts.
- Not intended for use in luminaries for high-risk task area lighting.

### Dimension




## Relevant standard

IEC 61347-1
IEC 61347-2-7
EN 62034
EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
EN 62493
AS/NZS 60598-2-22
AS2293.3

## Ordering data

| Model No.: | Input voltage | Output voltage/power (Emegency mode) | Battery pack | Duration (E.M mode) |
|---|---|---|---|---|
| YH25-2031050Li | 220-240Vac 50-60Hz | 10-50Vdc 2W cp | LiFePO4 6.4V 1.5Ah | 180minutes |
| YH25-3031050Li | 220-240Vac 50-60Hz | 10-50Vdc 3W cp | LiFePO4 6.4V 2.2Ah | 180minutes |

*YH25 / with self test funtion

*CP: Constant power

# Remote Emergency Pack for LED Luminaires YH25 Series Self-test

## Technical data

- Input rated voltage: 220-240V AC, 50-60Hz
- AC input current: 50mA max
- AC Input power rated 4.0 W max
- Power factor: >0.5
- Charge time : 16 hours
- Charge mode: trickle re-charging on battery.
- Output emergency power 2,3 wattage DC10...50V (3-15 LEDs) constant power output.
- Output voltage DC10...50V, DC55V max(SELV)
- Battery capacity (LiFePO4) 1500mAh, 2200mAh
- Battery Charging Current: 0-250mA
- 3 hours rated duration
- Max. casing temperature tc 70°C
- Lumen Factor: 120lm/Wattage
- Reinforced insulation between mian supply and the battery circuit.
- This unit can recharge the battery normally after reconnecting of battery.

## Battery information

Technical data(battery cells)

| Battery model | IFR18650-1500 | IFR18500-1100 |
|---|---|---|
| Battery voltage per cell | 3.2V | 3.2V |
| Battery capacity per cell | 1500mAh | 1100mAh |
| Battery case temperature | 0....60° | 0....60° |
| Max short term temperature | 70° | 70° |

Technical data(battery pack)

| Model No.: | Rated | Type | Number of cells | Battery cells type |
|---|---|---|---|---|
| YHBL-2-1.5B | 6.4V 1.5AH 9.6Wh | IFR18650-1500 2s1p | 2 | IFR18650-1500 |
| YHBL-2-2.2 | 6.4V 2.2AH 14.08Wh | IFR18500-1100 2s2p | 4 | IFR18500-1100 |

*2S1P
S: Series connection P: Parallel connection

**Notes.**
If users would like to change the batteries pack, please use the nominated models of STREAMER , then it will be under the warranty .

## Self-test funtion

The self-test of YH25 series covers function testing and duration test. Function test refers to charging, discharging and the working situation of load, and duration test mainly refers to the test of batteries' capacity.

Manual test is also working as default

If the main power is off when the self test happens, the emergency driver will be working with a priority immediately, until the batteries run out. The self test will be operating again when the batteries are charged fully afterwards.

The failure mode in self-test will be maintained, until the user figures out the failure issue.

If the main power of the LED emergency driver is consistently switched on/off for 3 times, the self-test will be re-set .

Self-test is under the regulation of EN62034.

Please refer to the below chart of the working situation (working well or working failure) of the LED emergency driver. The different colors and the flashing modes of LED indicator will refer to different situations.

# Remote Emergency Pack for LED Luminaires
# YH25 Series Self-test

**Explanation of LED indicator**

| | Color | LED indication | Status | Comment |
|---|---|---|---|---|
| | Green | Permanent green | Charging Mode or Fully Charged | AC mode |
| | Green | Fast flashing green (0.1 sec on, 0.1 sec off) | Function test underway | |
| | Green | Slow flashing green (1 sec on, 1 sec off) | Duration test underway | |
| | Red | Permanent red | Load failure | Open circuit / Short circuit / LED failure |
| | Red | Slow flashing red (1 sec on, 1 sec off) | Battery failure | Battery failed the duration test or function test / No battery |
| | | Green and red off | DC mode | Battery operation (emergency mode) |

### Initial test
Connect led load, emergency module, battery and led driver, then connect mains supply, this emergency conversion module will automatically start to do a initial test, to check led load, battery, led driver and emergency module itself working well or not. If not, led indicator would be red flash. If everything goes well, it then goes into charge mode.

### Functional test
Functional tests are carried out for 10 seconds automatically every 30 calendar days.

### Duration test
Emergency conversion module will automatically make a full duration test every 180 calendar days to check capacity of battery.

### Note
If mains supply is off during self-test period, emergency conversion module would terminate self-test immediately and go into emergency mode.

### Timer reset functionality
The timer for function and duration test can be set to a particular time of the day by cycling the un-switched line supply 3 times within 1 minute.

### Rest mode
Rest mode can be initiated during emergency mode by pressing test switch longer than 3 seconds.

## Installation :

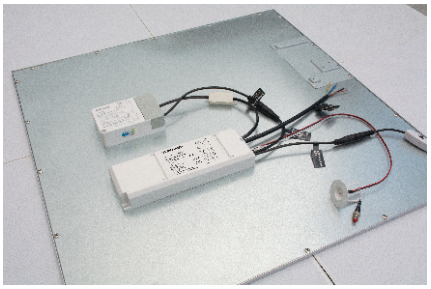


Fig.1

Fig.2

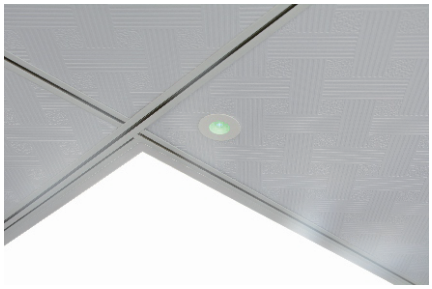
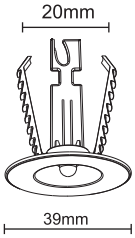


Fig.3

Fig.1 -The driver could be installed on the back of LED panels.
Fig.2 -There is a battery box in the driver, where users could replace the battery pack . But users have to use our battery pack modules.
Fig.3 -Please make a 20mm cutting hole on the ceiling , where you could install the LED holder .

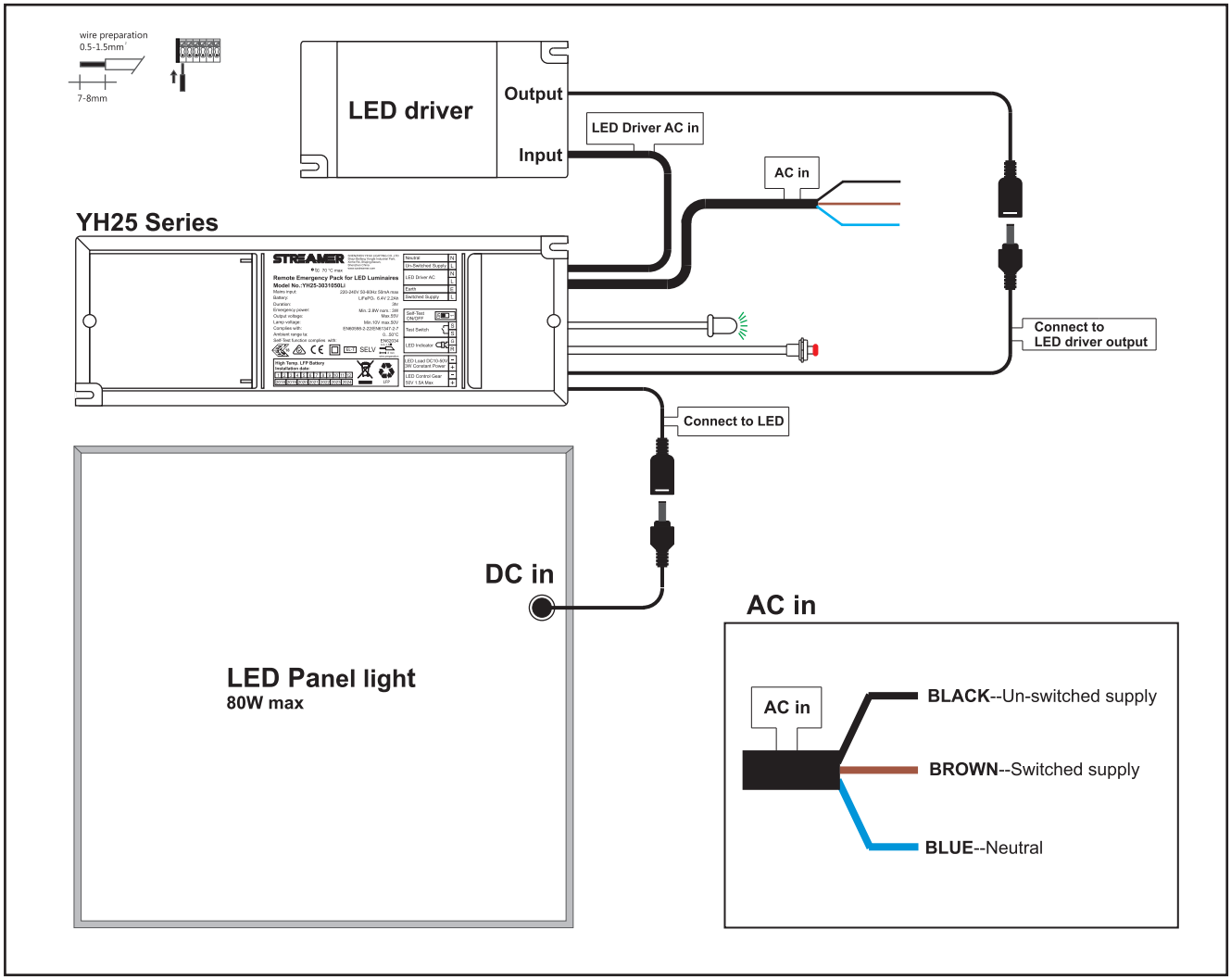


**LED Holder**

# Remote Emergency Pack for LED Luminaires
# YH25 Series Self-test

**Notes**:
Please do not cover this control gear .

## Wiring diagram(Maintained)




## Warranty

- Warranty **5** years
- Except for the following circumstances:
  1) Improper installation or operation.
  2) Misuse.
  3) Abuse.
  4) Unauthorized or improper repair alteration.
  5) Accident or negligence in use, storage, transportation.
  6) Any natural acts.

* If users would like to change the batteries pack, please use the nominated models of STREAMER , then it will be under the warranty .