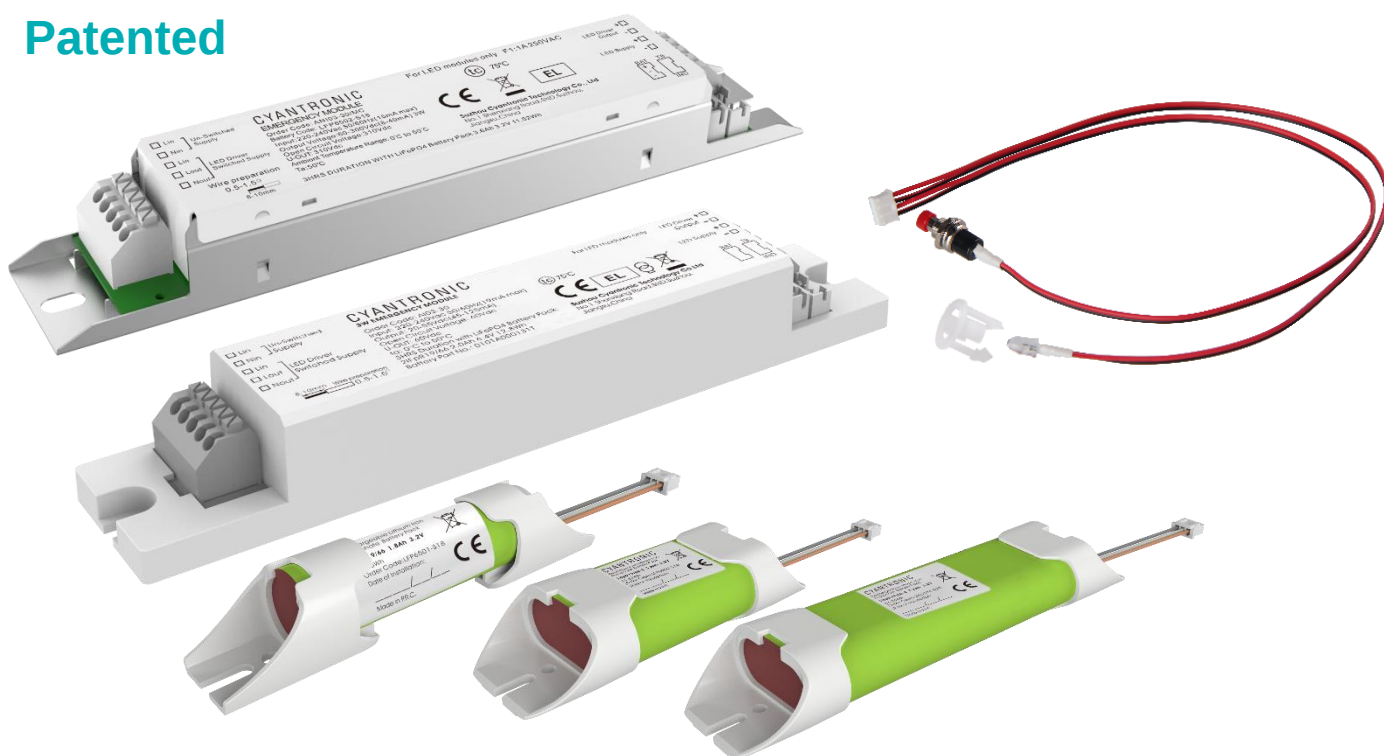


# α-ni

## Manual-test Internal Emergency Module for LED Linear Luminaires with Non-isolated Driver

适用于非隔离电源的 LED 线条形灯具的带手动测试功能的内置式应急电源

**Patented**



### Product Information 产品描述

The Emergency Module is suitable for the luminaires with integrated LEDs and separate LED drivers. It is designed for installing within the fitting to provide a battery back-up supply in the event of a power cut. The emergency module requires a permanent live un-switched supply to maintain the battery charge. In the event of a power cut, the battery will supply the luminaires at a reduced output.

此应急电源适用于由单独电源供电 LED 模块的灯具。并安装于灯具内部。应急电源需要持续通电以维持电池电量。在停电的情况下，电池以较低的功率给灯具中 LED 模块供电。

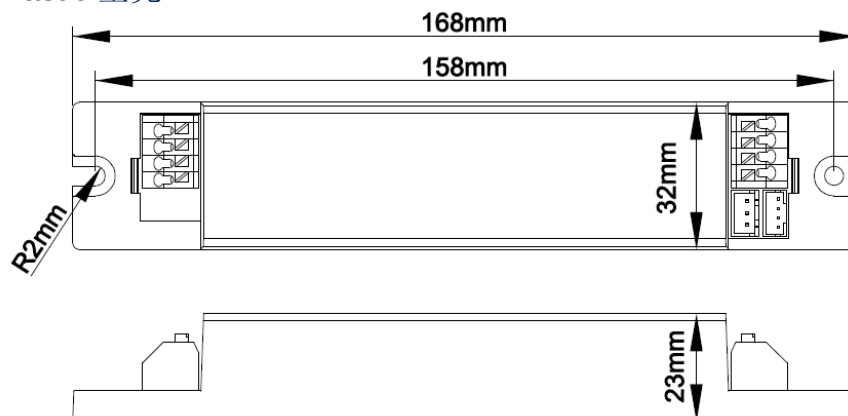
## Features 产品特点

- For LED modules with a forward voltage of 30-300Vdc
- For maintained or non-maintained emergency lighting systems
- Conforms to EN 61347-1 and EN 61347-2-7
- Wired between LED driver and LED module via terminals
- Suitable for use in luminaires for high-risk task area lighting
- Voltage change-over threshold according to EN 60598-2-22
- 1.5 hours or 3 hours rated duration
- LiFePO4 battery pack
- Over-charge, over-current, short-circuit and deep discharge protection for battery
- Green status LED indicator
- Constant power output
- For built-in
- Battery charging temperature control
- 适用于电压为30-300Vdc的LED模组
- 用于持续式或非持续式应急照明灯具
- 符合标准EN 61347-1, EN 61347-2-7
- 通过端子与电源及LED模组连线
- 适用于高风险任务区照明灯具
- 应急转换符合标准EN60598-2-22
- 1.5小时或3小时应急工作时间
- 磷酸铁锂电池组
- 具有过充、过流、短路、电池深度放电保护功能
- 绿色状态指示灯
- 恒功率输出
- 内置式应用
- 电池充电温度控制

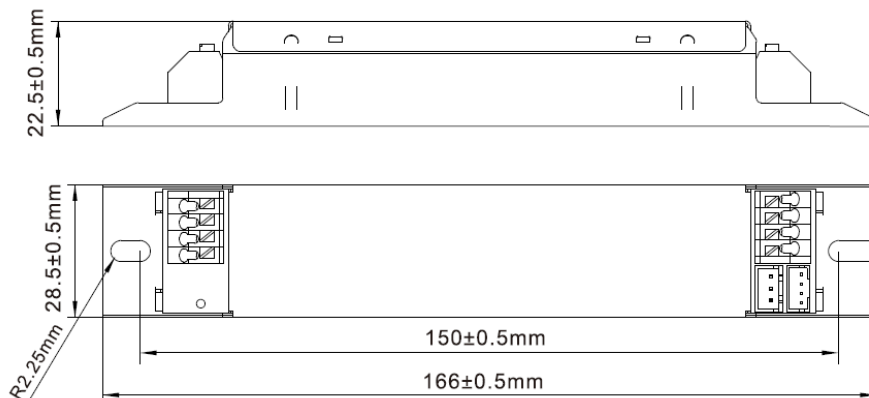
## Dimensions 产品尺寸

### Emergency Module 应急电源

#### Plastic 塑壳

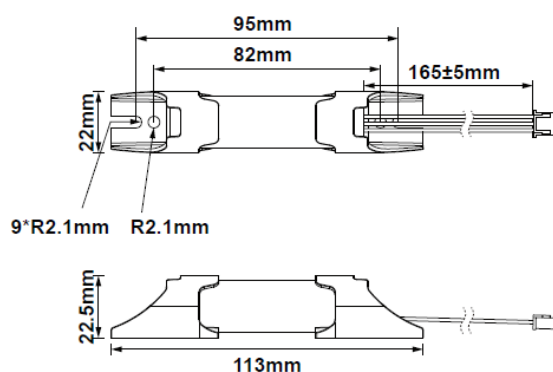


#### Metal 铁壳

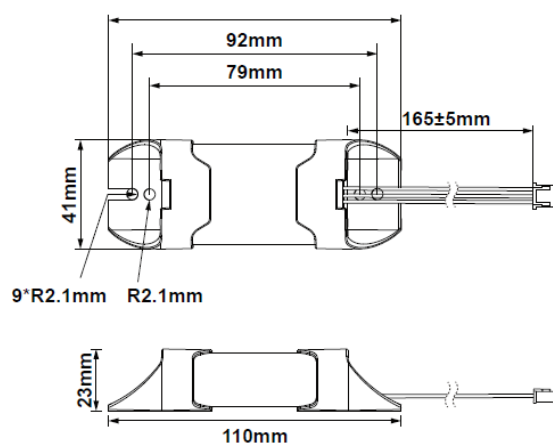


Battery Pack 电池

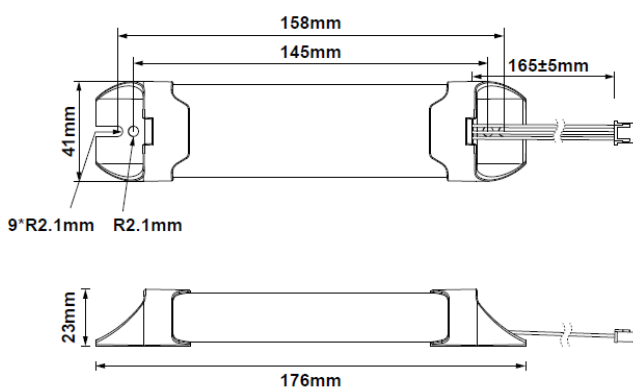
**1IFpR19/66 1.8Ah 3.2V**



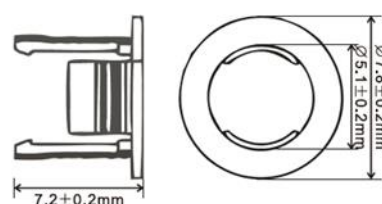
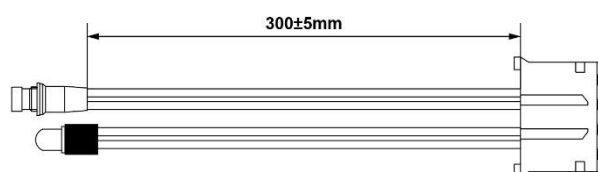
**2IFpR19/66 2.0Ah 6.4V**



**2IFpR19/66-2 4.0Ah 6.4V**



Indicator&Test Button Cable 指示灯&测试按钮线 Indicator Holder 指示灯固定座



|                                            |                                                                                  |                         |                                                                                  |                         |
|--------------------------------------------|----------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------|-------------------------|
| Product Code<br>产品型号                       | ANI03-30<br>ANI03-30/MC                                                          | ANI03-15<br>ANI03-15/MC | ANI05-30<br>ANI05-30/MC                                                          | ANI05-15<br>ANI05-15/MC |
| Input Parameters<br>输入参数                   |                                                                                  |                         |                                                                                  |                         |
| Rated Input Voltage Range<br>额定工作电压范围      | 220-240Vac                                                                       |                         |                                                                                  |                         |
| Operation Input Voltage Range<br>输入电压范围    | 198-264Vac                                                                       |                         |                                                                                  |                         |
| Input frequency<br>工作频率                    | 50/60Hz                                                                          |                         |                                                                                  |                         |
| Input Wattage (max)<br>输入功率（最大值）           | 3.5W @Rated Input Voltage & Battery full discharge<br>3.5W @额定工作电压输入及电池完全放电后     |                         | 4W @Rated Input Voltage & Battery full discharge<br>4W @额定工作电压输入及电池完全放电后         |                         |
| Input Current (max)<br>输入电流（最大值）           | 19mA @Rated Input Voltage & Battery full discharge<br>19mA @额定工作电压输入及电池完全放电后     |                         | 21mA @Rated Input Voltage & Battery full discharge<br>21mA @额定工作电压输入及电池完全放电后     |                         |
| Input PF<br>功率因数                           | PF:0.8 @Rated Input Voltage & Battery full discharge<br>PF:0.8 @额定工作电压输入及电池完全放电后 |                         | PF:0.8 @Rated Input Voltage & Battery full discharge<br>PF:0.8 @额定工作电压输入及电池完全放电后 |                         |
| Overvoltage Protection<br>过压保护             | No                                                                               |                         |                                                                                  |                         |
| Input Connection<br>输入端连接方式                | Push-fit terminals 0.5-1.5mm <sup>2</sup><br>按压快接端子 0.5-1.5mm <sup>2</sup>       |                         |                                                                                  |                         |
| Output Parameters<br>输出参数                  |                                                                                  |                         |                                                                                  |                         |
| Regulation Method<br>恒定方式                  | Constant Wattage<br>恒功率                                                          |                         |                                                                                  |                         |
| Battery Output Wattage(max)<br>电池输出功率(最大值) | 3W Max                                                                           |                         | 5W Max                                                                           |                         |
| Rated Output Wattage<br>额定输出功率             | 2.5W Max                                                                         |                         | 4W Max                                                                           |                         |
| Rated Output Voltage Range<br>额定输出电压范围     | 30-300Vdc                                                                        |                         |                                                                                  |                         |
| Rated Output Current Range<br>额定输出电流范围     | 7-75mA                                                                           |                         | 13-125mA                                                                         |                         |
| Max. Open Circuit Voltage<br>最大开路电压        | 310Vdc                                                                           |                         |                                                                                  |                         |
| U-OUT                                      | 310Vdc                                                                           |                         |                                                                                  |                         |
| Short-circuit Protection<br>短路保护           | Yes (For battery)                                                                |                         |                                                                                  |                         |
| Open Circuit Protection<br>开路保护            | No                                                                               |                         |                                                                                  |                         |

|                                                |                                                                                                                                                                                                                           |      |    |      |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----|------|
| Output Connection<br>输出端连接方式                   | Push-fit terminals 0.5-1.5mm <sup>2</sup><br>按压快接端子 0.5-1.5mm <sup>2</sup>                                                                                                                                                |      |    |      |
| Output Hot Plug-in<br>输出热拔插                    | When the driver is powered on and the battery is connected, reconnecting the LED luminaire is not allowed.<br>通电状态下，不允许重新插拔负载                                                                                             |      |    |      |
| Safety<br>安全                                   |                                                                                                                                                                                                                           |      |    |      |
| Input to Output Protection<br>输入到输出防护等级        | Double Insulation<br>双重绝缘                                                                                                                                                                                                 |      |    |      |
| Battery to Output Protection<br>电池到输出防护等级      | Basic Insulation<br>基本绝缘                                                                                                                                                                                                  |      |    |      |
| Mains Surge Capability<br>雷击                   | L-N:1KV                                                                                                                                                                                                                   |      |    |      |
| IP Protection<br>IP 等级                         | IP20                                                                                                                                                                                                                      |      |    |      |
| Emergency Information<br>应急信息                  |                                                                                                                                                                                                                           |      |    |      |
| Mains Voltage Changeover Threshold<br>应急转换电压范围 | 144-187Vac                                                                                                                                                                                                                |      |    |      |
| Emergency Operation Time<br>应急工作时间             | 3h                                                                                                                                                                                                                        | 1.5h | 3h | 1.5h |
| Emergency Conversion Time<br>应急转换时间            | <1s                                                                                                                                                                                                                       |      |    |      |
| Test Function<br>检测方式                          | Manual test<br>手动测试<br>1. Hold down the test button for a quick functional test.<br>按住测试按钮进行应急功能检测。<br>2. Switched off the un-switched supply for a 3-hour test after 24 hours fully charge.<br>充电 24H 后，关闭市电进行 3 小时放电测试。 |      |    |      |
| Environment & Life time<br>环境&寿命               |                                                                                                                                                                                                                           |      |    |      |
| Operating Temperature Range<br>工作环境温度          | Ta:0 to 50℃                                                                                                                                                                                                               |      |    |      |
| Maximum Case Temperature<br>外壳最高温度             | Tc:75℃                                                                                                                                                                                                                    |      |    |      |
| Operating Humidity<br>工作环境湿度                   | <75% RH (Not Condensing)                                                                                                                                                                                                  |      |    |      |
| Operating Altitude<br>工作海拔高度                   | ≤3000m                                                                                                                                                                                                                    |      |    |      |
| Driver Storage temp./humidity<br>驱动储存温度/湿度     | -20-50℃(≤75% RH)                                                                                                                                                                                                          |      |    |      |
| Driver Guarantee<br>驱动保修期                      | 5 Years<br>5 年                                                                                                                                                                                                            |      |    |      |
| Certifications and Standards<br>认证和标准          |                                                                                                                                                                                                                           |      |    |      |
| Certifications<br>认证                           | ENEC, CB, CE, RCM                                                                                                                                                                                                         |      |    |      |

|              |                                                   |
|--------------|---------------------------------------------------|
| Safety<br>安全 | EN 61347-1, EN 61347-2-7                          |
| EMC          | EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547    |
| RoHS         | Directive 2011/65/EU with amendment (EU) 2015/863 |
| Reach        | No.1907/ 2006(EC) SVCH 240                        |
| Patent<br>专利 |                                                   |
| EP3229557B1  | EMERGENCY LIGHTING                                |
| CN109640479B | 一种兼恒功率输出的应急驱动的照明装置                                |

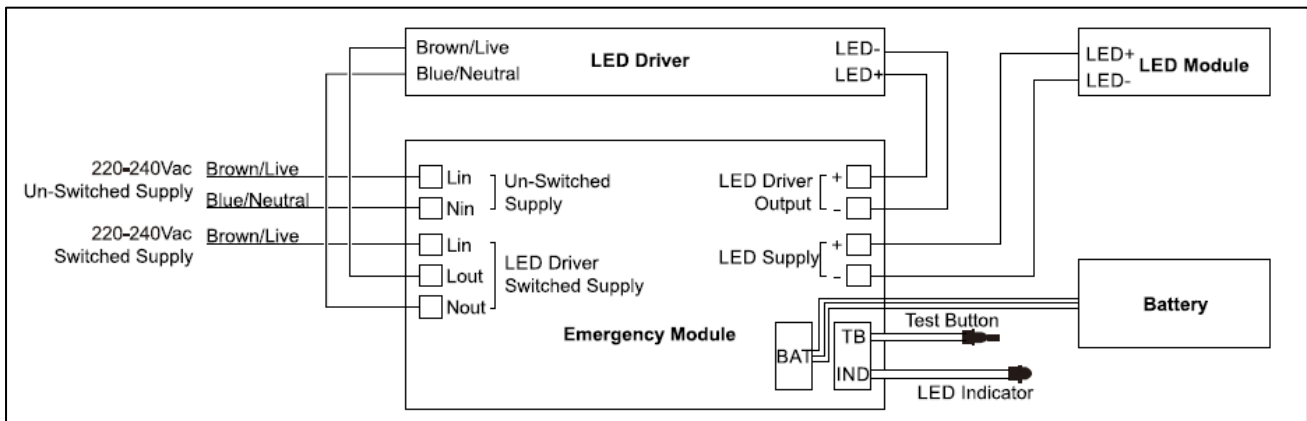
|                                                   |                                        |                                                |                                        |
|---------------------------------------------------|----------------------------------------|------------------------------------------------|----------------------------------------|
| Battery Pack<br>电池组                               |                                        |                                                |                                        |
| Battery Model<br>电池型号                             | 1IFpR19/66 1.8Ah 3.2V<br>(for 3W 1.5h) | 2IFpR19/66 2.0Ah 6.4V<br>(for 3W 3h / 5W 1.5h) | 2IFpR19/66-2 4.0Ah 6.4V<br>(for 5W 3h) |
| Cell Type<br>电芯规格                                 | LiFePO4 18650 3.2V<br>1800mAh          | LiFePO4 18650 3.2V<br>2000mAh                  | LiFePO4 18650 3.2V<br>2000mAh          |
| Number of cells<br>电芯数量                           | 1                                      | 2                                              | 4                                      |
| Series-parallel Combination<br>串并联方式              | 1S1P                                   | 2S1P                                           | 2S2P                                   |
| Rated Battery Capacity<br>标称电池容量                  | 1800mAh                                | 2000mAh                                        | 4000mAh                                |
| Rated Battery Voltage<br>标称电池电压                   | 3.2V                                   | 6.4V                                           | 6.4V                                   |
| Battery Energy<br>电池能量                            | 5.76Wh                                 | 12.8Wh                                         | 25.6Wh                                 |
| Battery Charge Voltage<br>电池充电电压                  | 3.65±0.1V                              | 7.3±0.1V                                       | 7.3±0.1V                               |
| Battery Charge Current<br>电池充电电流                  | Max.250mA                              | Max.250mA                                      | Max.280mA                              |
| Battery Discharge Voltage<br>电池放电电压               | 2.5-3.6V                               | 5.0-7.2V                                       | 5.0-7.2V                               |
| Battery Discharge Current<br>电池放电电流               | 900-960mA                              | 450-480mA(3W,3h)<br>750-870mA(5W,1.5h)         | 750-870mA                              |
| Charging Time<br>充电时间                             | 24h                                    | 24h                                            | 24h                                    |
| Charge Temperature Range<br>Tcmin-Tcmax<br>充电温度范围 | 0 to 65°C                              | 0 to 65°C                                      | 0 to 65°C                              |
| Battery Design Life<br>电池设计寿命                     | 5 Years at 50°C                        | 5 Years at 50°C                                | 5 Years at 50°C                        |
| Max. storage time<br>最长储存时间                       | 12 months<br>at +5 °C to +25 °C        | 12 months<br>at +5 °C to +25 °C                | 12 months<br>at +5 °C to +25 °C        |

## Customizable Accessories 可定制配件

| Type<br>类型                                     | Description<br>描述                                                                                          |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| LED indicator & Test button cable<br>指示灯及测试按钮线 | Green status LED indicator and test button cable with 4-pole plug<br>带4位连接器的绿色状态指示灯和测试按钮电线                 |
| Extension cable for battery<br>电池组延长线          | Extension cable for battery with 3-pole plug, available in 75mm or 130mm<br>带3位连接器的电池延长线, 有75mm或130mm 2种选择 |

## Wiring Diagram 接线图

Driver output current  $\leq 0.8A$  驱动输出电流  $\leq 0.8A$



Drive output current  $> 0.8A$  驱动输出电流  $> 0.8A$

