

α Plus Mains

Manual-Test Internal Emergency Module for LED Luminaires

适用于 LED 灯具的带手动测试功能的内置式应急电源



Product Information 产品描述

The Emergency Module is suitable LED luminaires which can operate normally with a mains DC input. 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.

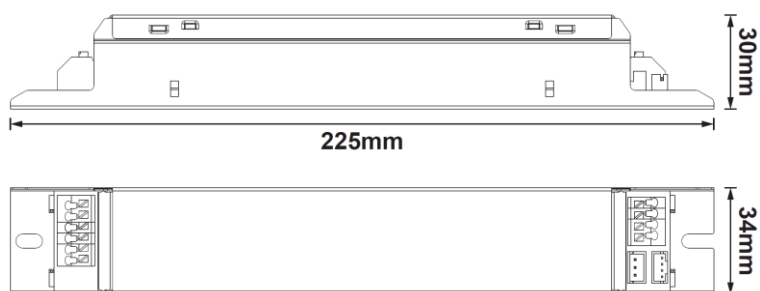
此应急电源适用于直流市电输入时可正常工作的 LED 灯具。安装于灯具内部。应急电源需要持续通电以维持电池电量。在停电的情况下，电池以较低的功率给灯具中 LED 模组供电。

Features 产品特点

- A mains DC voltage output 30-300Vdc
- For maintained emergency lighting systems
- Conforms to EN 61347-1 and EN 61347-2-7
- Wired between luminaire driver via terminals
- Suitable for use in luminaires for high-risk task area lighting
- Voltage change-over threshold according to EN 60598-2-22
- 3 hours rated duration
- Replaceable 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
- 可输出30-300Vdc直流市电电压
- 用于持续式应急照明灯具
- 符合标准EN 61347-1, EN 61347-2-7
- 通过端子与灯具的电源连线
- 适用于高风险任务区照明灯具
- 应急转换符合标准EN60598-2-22
- 3小时应急工作时间
- 可更换的磷酸铁锂电池组
- 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

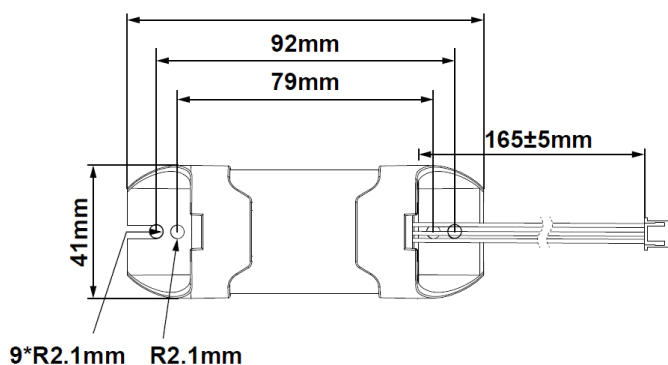
Dimensions 产品尺寸

Emergency Module 应急电源

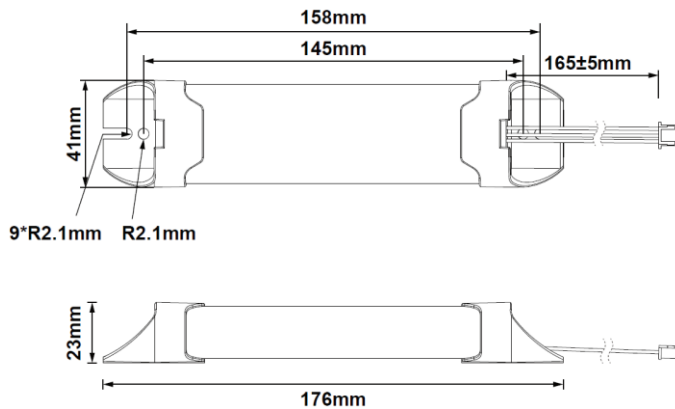


Battery Pack 电池

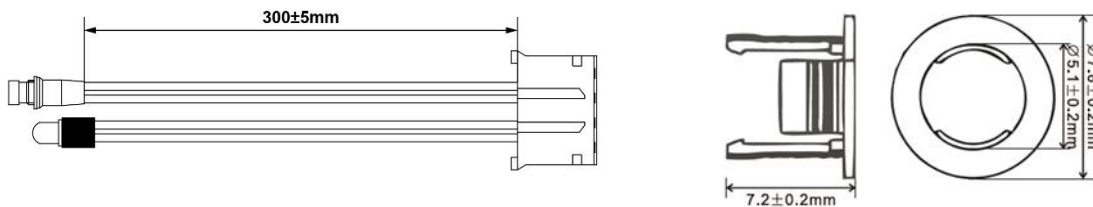
2IFpR19/66 2.0Ah 6.4V



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



Specifications 产品参数

Product Code 产品型号	APM03-30/MC	APM05-30/MC
Input Parameters 输入参数		
Rated Input Voltage Range 额定工作电压范围	220-240Vac	
Operation Input Voltage Range 输入电压范围	198-264Vac	
Input frequency 工作频率	50/60Hz	
Input Wattage (max) 输入功率（最大值）	3.5W @Rated Input Voltage & Battery full discharge 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 4W @额定工作电压输入及电池完全放电后
Input Current (max) 输入电流（最大值）	19mA @Rated Input Voltage & Battery full discharge 19mA @额定工作电压输入及电池完全放电后	21mA @Rated Input Voltage & Battery full discharge 21mA @额定工作电压输入及电池完全放电后
Input PF 功率因数	PF:0.8 @Rated Input Voltage & Battery full discharge 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 PF:0.8 @额定工作电压输入及电池完全放电后
Overvoltage Protection 过压保护	No	
Input Connection 输入端连接方式	Push-fit terminals 0.5-1.5mm ² 按压快接端子 0.5-1.5mm ²	

Output Parameters 输出参数		
Regulation Method 恒定方式	Constant Wattage 恒功率	
Battery Output Wattage(max) 电池输出功率(最大值)	3W Max	5W Max
Rated Output Wattage 额定输出功率	2.5W Max	4W Max
Rated Output Voltage Range 额定输出电压范围	30-300Vdc	
Rated Output Current Range 额定输出电流范围	7-75mA	13-125mA
Max. Open Circuit Voltage 最大开路电压	310Vdc	
U-OUT	310Vdc	
Short-circuit Protection 短路保护	Yes (For battery)	
Open Circuit Protection 开路保护	No	
Output Connection 输出端连接方式	Push-fit terminals 0.5-1.5mm ² 按压快接端子 0.5-1.5mm ²	
Output Hot Plug-in 输出热拔插	When the driver is powered on and the battery is connected, reconnecting the LED luminaire is not allowed. 通电状态下，不允许重新插拔负载	
Safety 安全		
Input to Output Protection 输入到输出防护等级	Double Insulation 双重绝缘	
Battery to Output Protection 电池到输出防护等级	Basic Insulation 基本绝缘	
Mains Surge Capability 雷击	L-N:1KV	
IP Protection IP 等级	IP20	
Emergency Information 应急信息		
Mains Voltage Changeover Threshold 应急转换电压范围	144-187Vac	
Emergency Operation Time 应急工作时间	3h	3h
Emergency Conversion Time 应急转换时间	<1s	
Test Function 检测方式	Manual (Not Automatic Self-Test) 手动测试(非自测试式) 1. Hold down the test button for a quick functional test. 按住测试按钮进行应急功能检测。 2. Switched off the un-switched supply for a 3-hour test after 24 hours fully charge. 充电 24H 后，关闭市电进行 3 小时放电测试。	

Environment & Life time 环境&寿命	
Operating Temperature Range 工作环境温度	Ta:0 to 50°C
Maximum Case Temperature 外壳最高温度	Tc:75°C
Operating Humidity 工作环境湿度	<75% RH (Not Condensing)
Operating Altitude 工作海拔高度	≤3000m
Driver Storage temp./humidity 驱动储存温度/湿度	-20-50°C(≤75% RH)
Driver Guarantee 驱动保修期	5 Years 5 年
Certifications and Standards 认证和标准	
Certifications 认证	CE
Safety 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 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 电池组		
Battery Model 电池型号	2IFpR19/66 2.0Ah 6.4V (for 3W)	2IFpR19/66-2 4.0Ah 6.4V (for 5W)
Cell Type 电芯规格	LiFePO4 18650 3.2V 2000mAh	LiFePO4 18650 3.2V 2000mAh
Number of cells 电芯数量	2	4
Series-parallel Combination 串并联方式	2S1P	2S2P
Rated Battery Capacity 标称电池容量	2000mAh	4000mAh
Rated Battery Voltage 标称电池电压	6.4V	6.4V
Battery Energy 电池能量	12.8Wh	25.6Wh
Battery Charge Voltage 电池充电电压	7.3±0.1V	7.3±0.1V
Battery Charge Current 电池充电电流	Max.250mA	Max.280mA

Battery Discharge Voltage 电池放电电压	5.0-7.2V	5.0-7.2V
Battery Discharge Current 电池放电电流	450-480mA	750-870mA
Charging Time 充电时间	24h	24h
Charge Temperature Range Tcmin-Tcmax 充电温度范围	0 to 65°C	0 to 65°C
Battery Design Life 电池设计寿命	5 Years at 50°C	5 Years at 50°C
Max. storage time 最长储存时间	12 months at +5 °C to +25 °C	12 months at +5 °C to +25 °C

Customizable Accessories 可定制配件

Type 类型	Description 描述
LED indicator & Test button cable 指示灯及测试按钮线	Green status LED indicator and test button cable with 4-pole plug 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 电池组延长线	Extension cable for battery with 3-pole plug, available in 75mm or 130mm 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

