




LM-LI030-060

Li (NiCoMn) O₂
PWM Solar Charge Controller



-  **Mobile Charging**
-  **Fan**
- 1**  **5-volt USB Ports**
- Light Points**
- 3** **years warranty**

Model	LM-LI030	LM-LI045	LM-LI060
General Information			
PV Module	30W/18V	45W/18V	60W/18V
Battery Capacity	11.1V/14000 mAh, 155Wh	11.1V/18000 mAh, 200Wh	11.1V/24000 mAh, 266Wh
LED Lamp	3W*3, 280lm	2W*3, 280lm	2W*3, 280lm
Working hours (Full battery run time)	19 hrs for 3*3W LED	24 hrs for 3*3W LED	32 hrs for 3*3W LED
Port	5V/1A USB port*1, 11.1V/1A DC port*5		
PV Module Details			
PV Module type	Polycrystalline silicon	Polycrystalline silicon	Polycrystalline silicon
Maximum Power	30 watts	45 watts	60 watts
Nominal Voltage	18V	18V	18V
Optimum Power Voltage(Vmp)	18.36V	18.38V	19.01V
Optimum Operating Current(Imp)	1.63A	2.45A	3.16A
Open Circuit Voltage(Voc)	22.00V	22.00V	22.61V
Short Circuit Current(Isc)	1.75A	2.62A	3.38A
Size of Module (L.N.W)	710*360*28mm	545*668*28mm	655*668*35mm
Battery Details			
Battery Replaceability	Easily replaceable with common tools. Warranty is void if battery is replaced by end user		
Battery Chemistry	Lithium-ion		
Battery Package Type	18650		
Battery Nominal Voltage	11.1V		
Battery Charging Voltage	12.6V		
Cycle Performance	1000 times (with 80% of its original capacity remaining)		
PCM (Protective Circuit Module)	Overcharge/deep discharge/over current/short circuit protection, battery balance		
PCM Overcharge Protection	4.25±0.05V		
PCM Deep Discharge Protection	2.7±0.1V		
Controller Details			
Controller Nominal Voltage	11.1V		
Controller Max.Charge Current	10A		
Controller Load Current	10A		
LED Indicators	Solar Charging, Battery Capacity, Load Status		
Controller Protection	Overcharge/deep discharge/over current/short circuit protection, reverse polarity protection		
Max. Charging Cut-off Voltage	12.4±0.2V		
PV Input Voltage	9-18V		
Deep discharge Voltage Protection	10.0±0.2V		
Deep discharge Voltage Protection Recover	11.1±0.2V		
Over Voltage Protection	>13.5±0.2V		
Over Voltage Protection Recover	<13.4±0.2V		
Short Circuit Protection	Cut off the output immediately		
Lighting Details			
Lamp Type	LED		
Description of Light Points	12 LEDs in each of 3 light points		
Colour Characteristics	CRI 86, CCT 'Daylight' (>5000 k)		
Distribution Type	Wide		
Lumen Efficacy	100 lm/W		
Lumen Maintenance	100% of the original output remains after 2000 hours run time		
Durability			
Durability tests passed	Switch and connector cycling, strain relief test, physical ingress protection test. Indoor use		
Special Features			
Mobile charging	Charge mobile phone, torch, radio and other devices		
AC charging (optional)	Using AC adaptor to charge the system with grid electricity.		