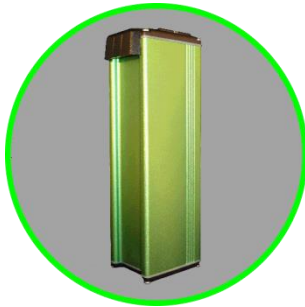


Litio Solar: Solar Home System Kit LS7000

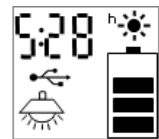


The Litio Solar Home System Kit combines long life products with easy Plug & Play installation. The Lithium Battery System's built-in solar battery MPPT charger, battery monitoring system and load output control optimize the conditions for a long battery lifespan. The advanced LCD display provides the user with valuable and precise system information. The charge indicator shows the remaining operation time calculation/display and can help the user to manage his energy consumption. The USB outlet allows many 5V USB devices to be recharged or operated. Common 12V loads can be operated by the system. The Sunflower LED Lamp's unique heat sink design and high frequency LED driver and included excess-temperature protection (dimming) as well as the absence of electrolytic capacitors make sure the lamp can last for very long time, even in harsh environments. The built-in 5m wire with switch and plug for an easy installation makes the system setup very simple. The optional extra extension wires make the system highly adjustable to different distances between the lamps place of use and the Litio System. The Solar Panels power is optimized for recharging the Lithium Battery. In order to recharge the battery faster or in case of higher energy demands, it is possible to add more solar power to the system; multiple Kits can be combined and recharged together. As multiple Kits can be combined and recharged together it is easy to expand existing systems on request.

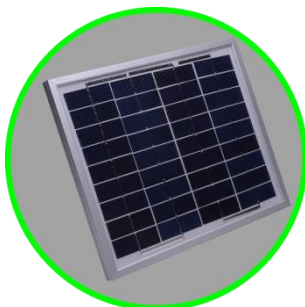
Litio Solar's Key features



- **Long Life Lithium Iron Phosphate Battery System >1500 full cycles**
- 12.8V nominal voltage: can operate standard 12V loads
- Rugged Aluminum housing
- 51Wh/89Wh capacity available
- MPPT-Charge Controller
- LCD-Display with remaining load operation time
- Battery Management System integrated
- Single battery cell monitoring
- Low-battery warning
- System paralleling



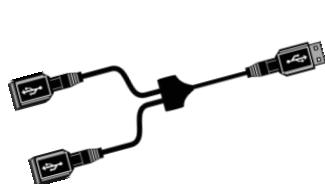
- LED Lamps
- Sunflower LED **long life lamp** >60,000h (L70)
- High performance heatsink
- Excess temperature protection dimming
- Excellent performance in high altitude and hot environments
- 200lm/300lm/500lm available
- **Constant lumen output** during battery discharge



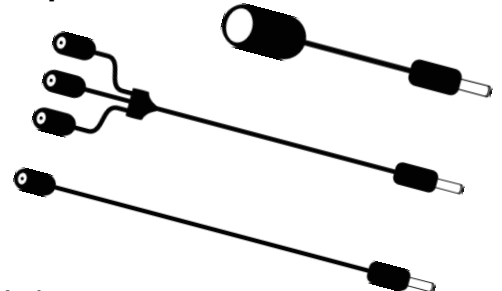
- Solar Panel 10Wp or 2 * 10Wp standard
- Standard 12V panel can be applied (any power)
- Panel mounting bracket available (option)



Wiring options for flexible System setup



- Extension wires
- Distribution wires
- Cigar lighter socket adapter
- USB distributor



Optional Accessories:

- NiMH battery charger for AA and AAA size batteries
- Laptop charger (combine with LS7000)
- Radio battery adapter



Solar Home System Kit LS7000-K001

3 Lamps Technical data/ Kit content:



Battery System	Description:		Rating:	Content:
	Litio Solar 7000: Lithium Iron Phosphate battery system with solar charger and LCD display		12.8V / 7Ah / 89Wh	1 pc
	Ports:	Rating:	Number of Ports	
	Solar Input	20Wp ¹	1 / 3 ²	
	12V for Light Points and other 12V devices	6A load output max.	3 ³	
	5V-USB	1.5A USB load	1	

Lighting	Description of Light Points:		Individual Lumen Output:	Content:
	Light Point 1:	Sunflower 2W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	220lm Individual full battery runtime: 41 hours	1 pc
	Light Point 2:	Sunflower 3W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	320lm Individual full battery runtime: 28 hours	1 pc
	Light Point 3:	Sunflower 5W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	510lm Individual full battery runtime: 16.5 hours	1 pc
	Light Point 4:	Tube 3W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	320lm Individual full battery runtime: 28 hours	-
	Light Point 5:	Tube 5W lamp Accessory: 5m TL wire with switch CRI>80, CCT 5800K	510lm Individual full battery runtime: 16.5 hours	-
	Light Point 6:	Mini Sunflower USB Accessory: 8m USB wire with switch CRI>80, CCT 5800K	17lm Individual full battery runtime: 200 hours	-
	All light points lumen output		1050 Lumen	
	All light points run time after typical day of solar charging ⁴		7.5 hours (75Wh/day)	
	All lighting full battery run time		8.2 hours	

Solar	Description:		Rating:	Content:
	Polycrystalline Silicon Solar Panel Equipped with 5m wire		10W _p	2 pcs=20W _p
	Panel distribution wire		3 input, 2 output	1 pc
	Panel Installation Bracket			-

Accessory	Description:		Details:	Content:
	Mobile phone adapter		USB wire 1.5m Adapters: Nokia8210, Nokia 6101, Micro USB, Mini USB, KG90, G600/608, D808	1 set
			USB-wire 0.3m, Adapter: iPhone 4 +5	-
	Load distribution wire		Length: 3 m, 3 outputs	-
	Load extension wire		Length: 3 m	1 pc
	Load extension wire		Length: 5 m	1 pc
	Load wire		Length: 0.4m, open end	-
	USB distributor		2 USB output	-
	Cigar lighter socket adapter		Length: 1 m	-

Product Warranty:

2 years on battery, 3 years on all other equipment's materials and manufacturing defects

Comment: Equipment display in grey font is optional and **not included** in the Kit

¹ Higher power solar panels can be connected, device will limit power draw, several Kits can be connected to one panel

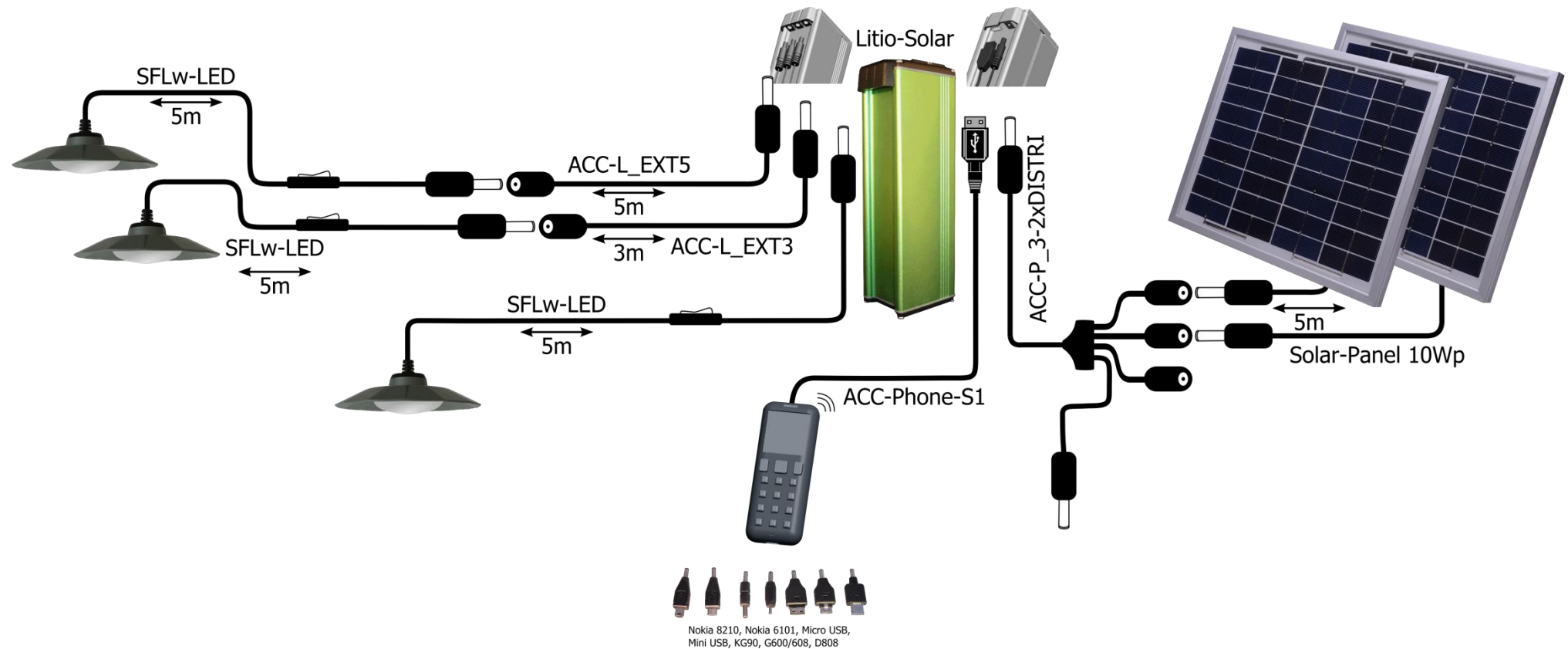
² Panel distribution wire

³ Number of outputs can be increased by load extension wire

⁴ A typical day of solar charging assumes 5kWh/m²/day

Solar Home System Kit LS7000-K001

3 Lamps Wiring diagram:



Solar Home System Kit LS7000-K011

5 Lamps Technical data/ Kit content:



Battery System	Description:		Rating:	Content:
	Litio Solar 7000: Lithium Iron Phosphate battery system with solar charger and LCD display		12.8V / 7Ah / 89Wh	1 pc
	Ports:	Rating:	Number of Ports	
	Solar Input	20Wp ⁵	1 / 3 ⁶	
	12V for Light Points and other 12V devices	6A load output max.	3 / 5 ⁷	
	5V-USB	1.5A USB load	1	

Lighting	Description of Light Points:		Individual Lumen Output:	Content:
	Light Point 1:	Sunflower 2W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	220lm Individual full battery runtime: 41 hours	2 pc
	Light Point 2:	Sunflower 3W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	320lm Individual full battery runtime: 28 hours	2 pc
	Light Point 3:	Sunflower 5W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	510lm Individual full battery runtime: 16.5 hours	-
	Light Point 4:	Tube 3W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	320lm Individual full battery runtime: 28 hours	-
	Light Point 5:	Tube 5W lamp Accessory: 5m TL wire with switch CRI>80, CCT 5800K	510lm Individual full battery runtime: 16.5 hours	-
	Light Point 6:	Mini Sunflower USB Accessory: 8m USB wire with switch CRI>80, CCT 5800K	17lm Individual full battery runtime: 200 hours	1 pc
	All light points lumen output		1097 Lumen	
	All light points run time after typical day of solar charging ⁸		7.3 hours (75Wh/day)	
	All lighting full battery run time		8 hours	

Solar	Description:		Rating:	Content:
	Polycrystalline Silicon Solar Panel Equipped with 5m wire		10W _p	2 pcs=20W _p
	Panel distribution wire		3 input, 2 output	1 pc
	Panel Installation Bracket			1 pc

Accessory	Description:		Details:	Content:
	Mobile phone adapter		USB wire 1.5m Adapters: Nokia8210, Nokia 6101, Micro USB, Mini USB, KG90, G600/608, D808	1 set
			USB-wire 0.3m, Adapter: iPhone 4 +5	-
	Load distribution wire		Length: 3 m, 3 outputs	1 pc
	Load extension wire		Length: 3 m	-
	Load extension wire		Length: 5 m	-
	Load wire		Length: 0.4m, open end	-
	USB distributor		2 USB output	1 pc
	Cigar lighter socket adapter		Length: 1 m	1 pc

Product Warranty:

2 years on battery, 3 years on all other equipment's materials and manufacturing defects

Comment: Equipment display in grey font is optional and **not included** in the Kit

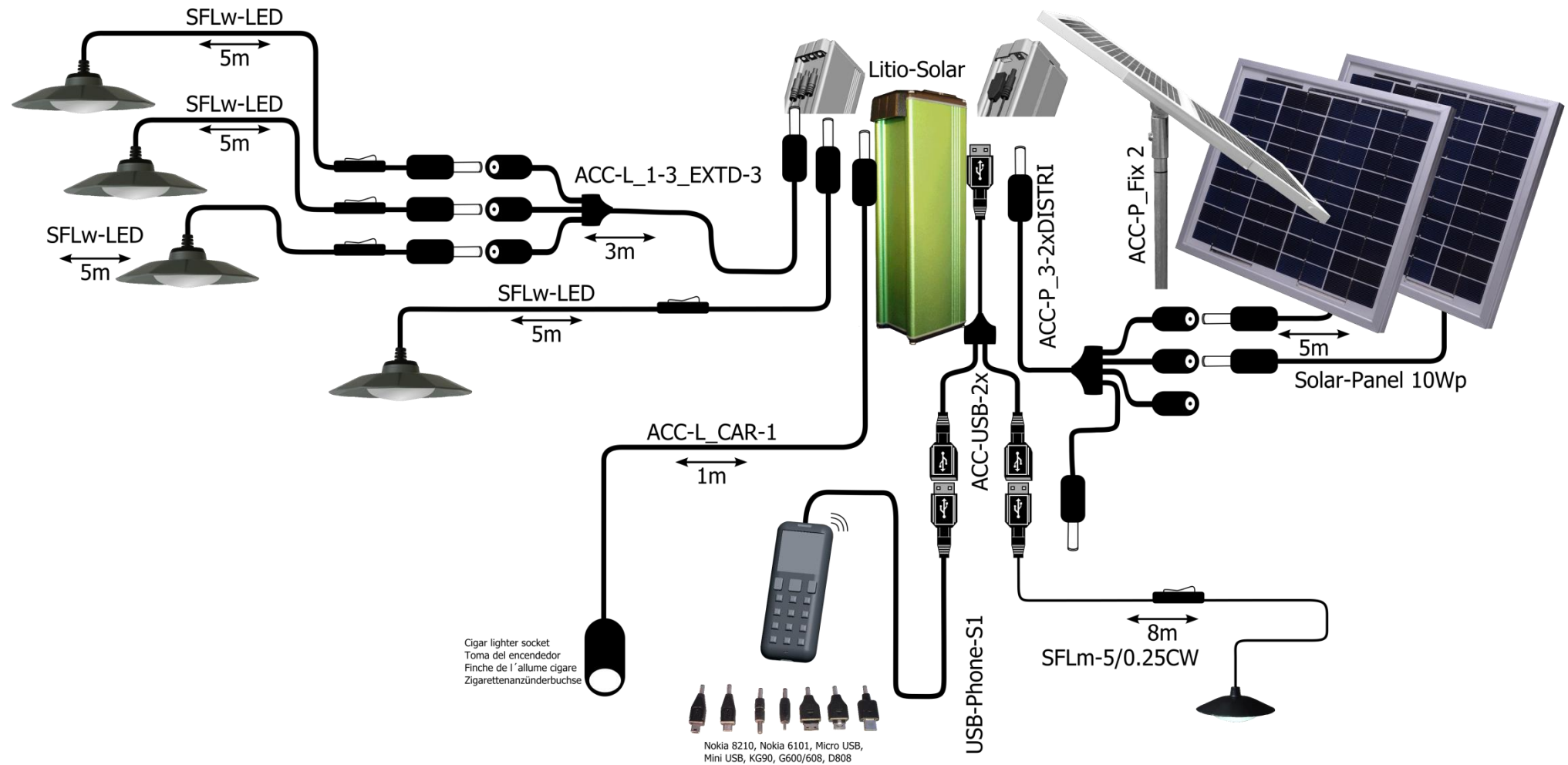
⁵ Higher power solar panels can be connected, device will limit power draw, several Kits can be connected to one panel

⁶ Panel distribution wire

⁷ Number of outputs can be increased by load extension wire

⁸ A typical day of solar charging assumes 5kWh/m²/day

5 Lamps Wiring Diagram:



Solar Home System Kit LS7000-K012

6 Lamps Technical data/ Kit content:



Battery System	Description:		Rating:	Content:
	Litio Solar 7000: Lithium Iron Phosphate battery system with solar charger and LCD display		12.8V / 7Ah / 89Wh	1 pc
	Ports:	Rating:	Number of Ports	
	Solar Input	20Wp ⁹	1 / 3 ¹⁰	
	12V for Light Points and other 12V devices	6A load output max.	3 / 5 ¹¹	
	5V-USB	1.5A USB load	1	

Lighting	Description of Light Points:		Individual Lumen Output:	Content:
	Light Point 1:	Sunflower 2W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	220lm Individual full battery runtime: 41 hours	2 pc
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	Light Point 4:	Tube 3W lamp Equipped with 5m wire and switch CRI>80, CCT 5800K	320lm Individual full battery runtime: 28 hours	1 pc
	Light Point 5:	Tube 5W lamp Accessory: 5m TL wire with switch CRI>80, CCT 5800K	510lm Individual full battery runtime: 16.5 hours	-
	Light Point 6:	Mini Sunflower USB Accessory: 8m USB wire with switch CRI>80, CCT 5800K	17lm Individual full battery runtime: 200 hours	1 pc
	All light points lumen output		1417 Lumen	User prewarning at ca. 10% left capacity
	All light points run time after typical day of solar charging ¹²		5.6 hours	
	All lighting full battery run time		6.2 hours	

Solar	Description:		Rating:	Content:
	Polycrystalline Silicon Solar Panel Equipped with 5m wire		10W _p	2 pcs=20W _p
	Panel distribution wire		3 input, 2 output	1 pc
	Panel Installation Bracket			1 pc

Accessory	Description:		Details:	Content:
	Mobile phone adapter		USB wire 1.5m Adapters: Nokia8210, Nokia 6101, Micro USB, Mini USB, KG90, G600/608, D808	1 set
			USB-wire 0.3m, Adapter: iPhone 4 +5	1 set
	Load distribution wire		Length: 3 m, 3 outputs	2 pc
	Load extension wire		Length: 3 m	-
	Load extension wire		Length: 5 m	-
	Load wire		Length: 0.4m, open end	-
	USB distributor		2 USB output	1 pc
	Cigar lighter socket adapter		Length: 1 m	1 pc

Product Warranty:

2 years on battery, 3 years on all other equipment's materials and manufacturing defects

Comment: Equipment display in grey font is optional and **not included** in the Kit

⁹ Higher power solar panels can be connected, device will limit power draw, several Kits can be connected to one panel

¹⁰ Panel distribution wire

¹¹ Number of outputs can be increased by load extension wire

¹² A typical day of solar charging assumes 5kWh/m²/day

Solar Home System Kit LS7000-K012

6 Lamps Wiring diagram:

