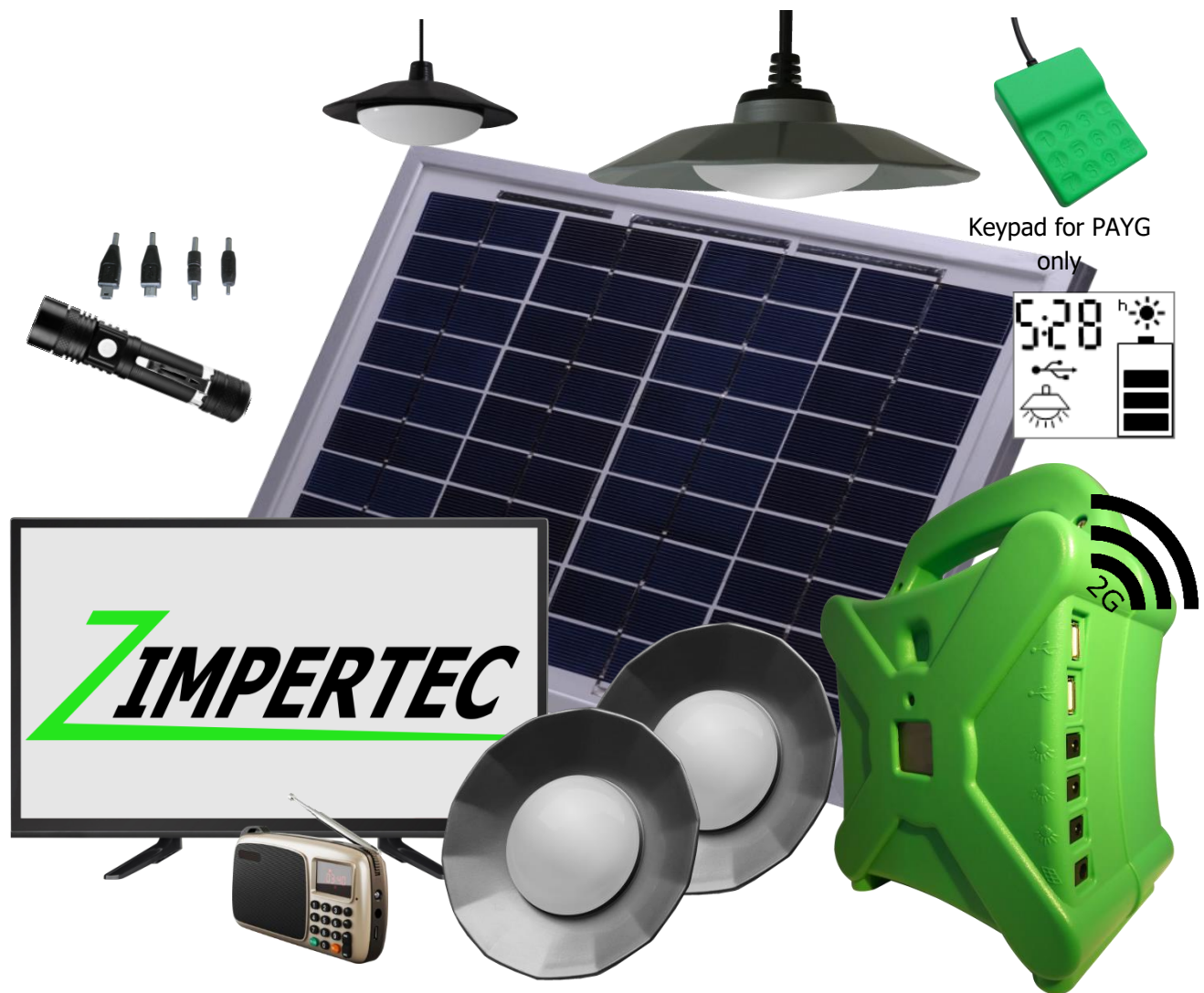


## Litio Solar: LSX Solar Home System Kit



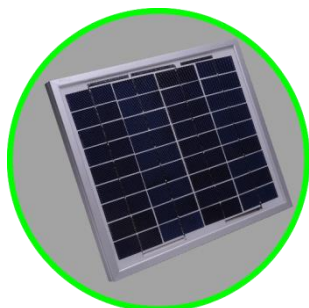
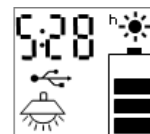
The Litio Solar Home System Kit combines long life products with easy Plug & Play installation. The Lithium Battery System's built-in solar battery MPPT charger, battery monitoring system and load output control optimize the conditions for a long battery lifespan. The advanced LCD display provides the 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.

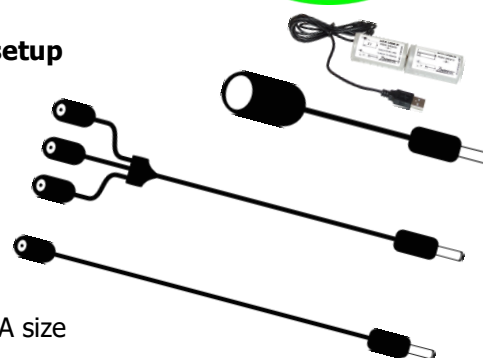
## Litio Solar's Key features and optional accessories

- **Long Life Lithium Iron Phosphate Battery System >2000 full cycles**
- 12.8V: can operate standard 12V loads
- Rugged PC housing
- **70Wh up to 281Wh 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 (load and panel side)
- **Built in 1 year Data-Logger** (standard)
- **Pay As You Go Ready with Luzhy Platform**
- **2G connectivity, remote monitoring with Luzhy platform (option)**
- 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
- 280lm/420lm/560lm available
- **Constant lumen output** and constant power during battery discharge
- **Mini Sunflower 17lm (5V and 12V Versions)**
- Solar Panel, various power possible
- Standard 12V panel can be applied (any power)
- Panel mounting bracket available (option currently only for 30Wp)



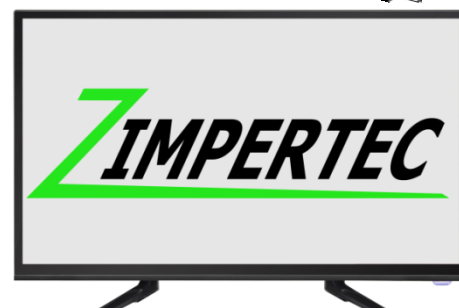
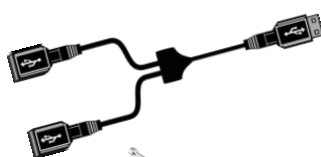
### Wiring options for flexible System setup

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



### Optional Accessories:

- TV, FM/AM rechargeable Radio
- NiMH battery charger for AA and AAA size batteries
- Laptop charger
- Radio battery adapter



# Solar Home System Kit

## LSX5.5-C1A

### 3 Lamps



	Description:		charging current	load current	Rating:			Content:
	Lithium Iron Phosphate battery system with solar charger and LCD display 1 Solar Input, higher power solar panels can be connected, device will limit power draw, several LSX can be connected to one panel; 3 pcs 12V Load Output, Number of outputs can be increased by load distribution wire; 2 USB charging output (max. 1.5A)		5 A	6 A	12.8 V	5.5 Ah	70 Wh	1 pc
Description of optional Light Points and other Loads:								
	Light:	Sunflower	2 W	6.0 h	280 lm			3 pc
		Equipped with 5m wire and switch		36 Wh	Individual full battery runtime:		35 hours	
	Load:	Radio AM/FM	0.50 W	10.0 h				1 pc
				5 Wh				
	Load:	Mobile Phone charging	5.00 W	1.0 h				1 pc
				5 Wh				
		total light point power						6.00 W
		total load power (incl. Light points)						11.50 W
	All light points lumen output:							840 lm
	All light points run time after typical day of solar charging							11.67 hours
	assume solar day: 5.0 kWh/m²/day							70.0 Wh/day
	extra Energy during day time: →							(4 Wh/day)
	All lighting points + loads full battery runtime:							6.1 hours
	All lighting points full battery runtime:							11.7 hours

Solar	Description:		Rating:	Content:
	Polycrystalline Silicon Solar Panel Equipped with 6m wire		20 Wp	1 pc = 20 Wp

Accessory	Description:		Details	Content:
	Mobile phone adapter		USB wire, 1.5m Adapters: Nokia8210, Nokia 6101, Micro USB, Mini USB	1 pc
	Load distribution wire		Length: 3m, 3 outputs	1 pc
	Remote Connectivity		2G Communication	Option
	PAYG-Ready with Luzhy platform			yes

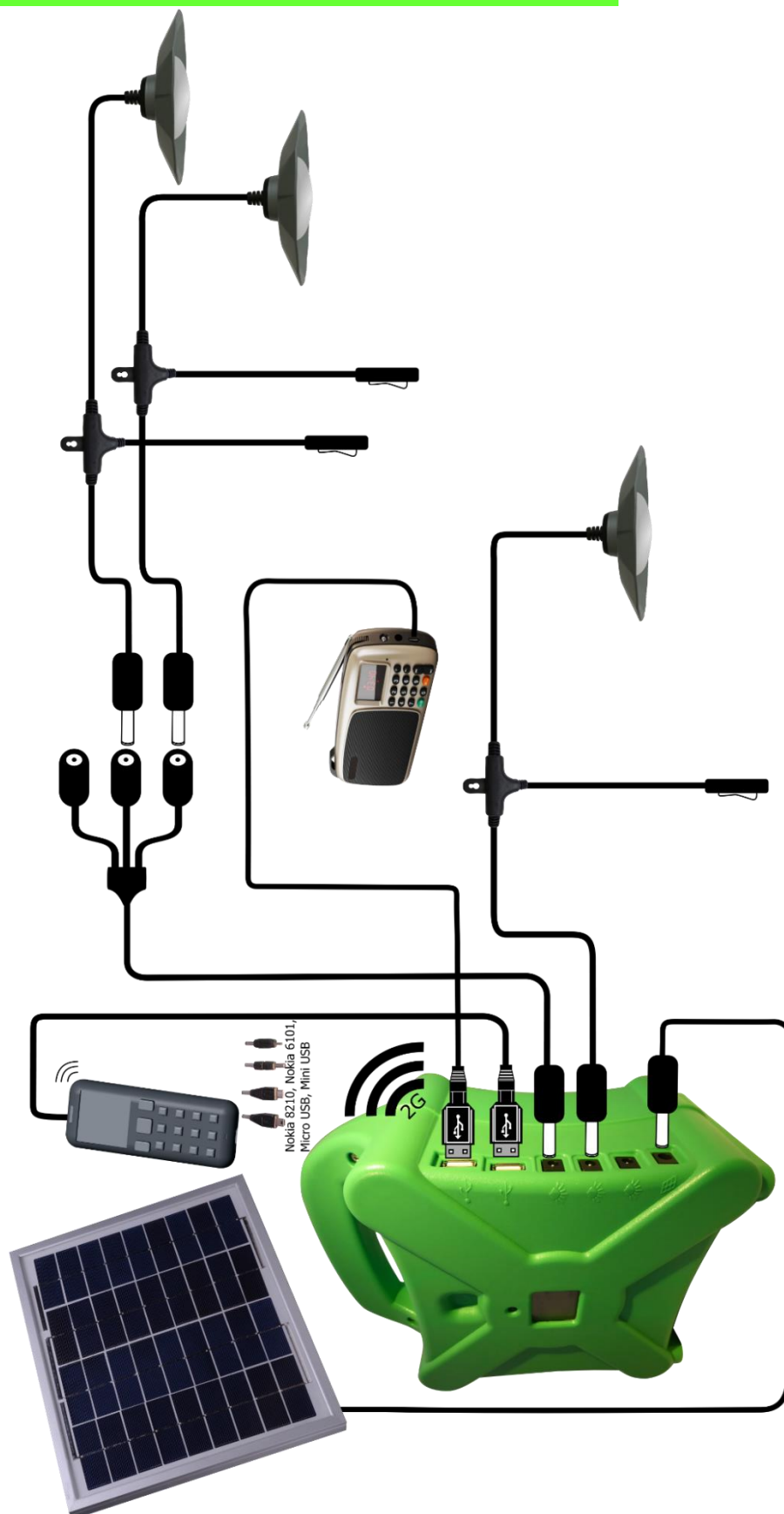
Values are calculated and can variate according environment conditions				
Product Warranty: 3 years on materials and manufacturing defects				
Operation ambient temperature -20 to +50°C; All values at 25°C ambient temperature				
TTL consumption per day:		46.0 Wh		
Battery autonomy at full battery:		1.52 days		
Daily harvest @ 5kWh/m <sup>2</sup> /Day up to:		74 Wh		
Daily harvest @ 3kWh/m <sup>2</sup> /Day up to:		44 Wh		

# Solar Home System Kit

## LSX5.5-C1A

3 Lamps

**ZIMPERTEC**



# Solar Home System Kit

## LSX07-C1B

### 3 Lamps



Description:	charging current	load current	Rating:			Content:
Lithium Iron Phosphate battery system with solar charger and LCD display 1 Solar Input, higher power solar panels can be connected, device will limit power draw, several LSX can be connected to one panel; 3 pcs 12V Load Output, Number of outputs can be increased by load distribution wire; 2 USB charging output (max. 1.5A)	5 A	6 A	12.8 V	7.0 Ah	89 Wh	1 pc

Description of optional Light Points and other Loads:				Individual Lumen Output:		Content:
Light:	Sunflower	2 W	8.0 h	280 lm		2 pc
	Equipped with 5m wire and switch		32 Wh	Individual full battery runtime:	45 hours	
Light:	Sunflower	3 W		420 lm		1 pc
	Equipped with 5m wire and switch			Individual full battery runtime:	30 hours	
Load:	Radio AM/FM	0.50 W	10.0 h			1 pc
			5 Wh	Individual full battery runtime:	178 hours	
Load:	Mobile Phone charging	5.00 W	1.0 h			1 pc
			5 Wh	Individual full battery runtime:	17.8 hours	
	total light point power					7.0 W
	total load power (incl. Light points)					12.5 W
All light points lumen output:						980 lm
All light points run time after typical day of solar charging						12.7 hours
assume solar day: 5.0 KWh/m2/day						89.0 Wh/day
extra Energy during day time: →						(22 Wh/day)
All lighting points full battery runtime:						12.7 hours

Solar	Description:	Rating:	Content:
	Polycrystalline Silicon Solar Panel Equipped with 6m wire	30 Wp	1 pc = 30 Wp

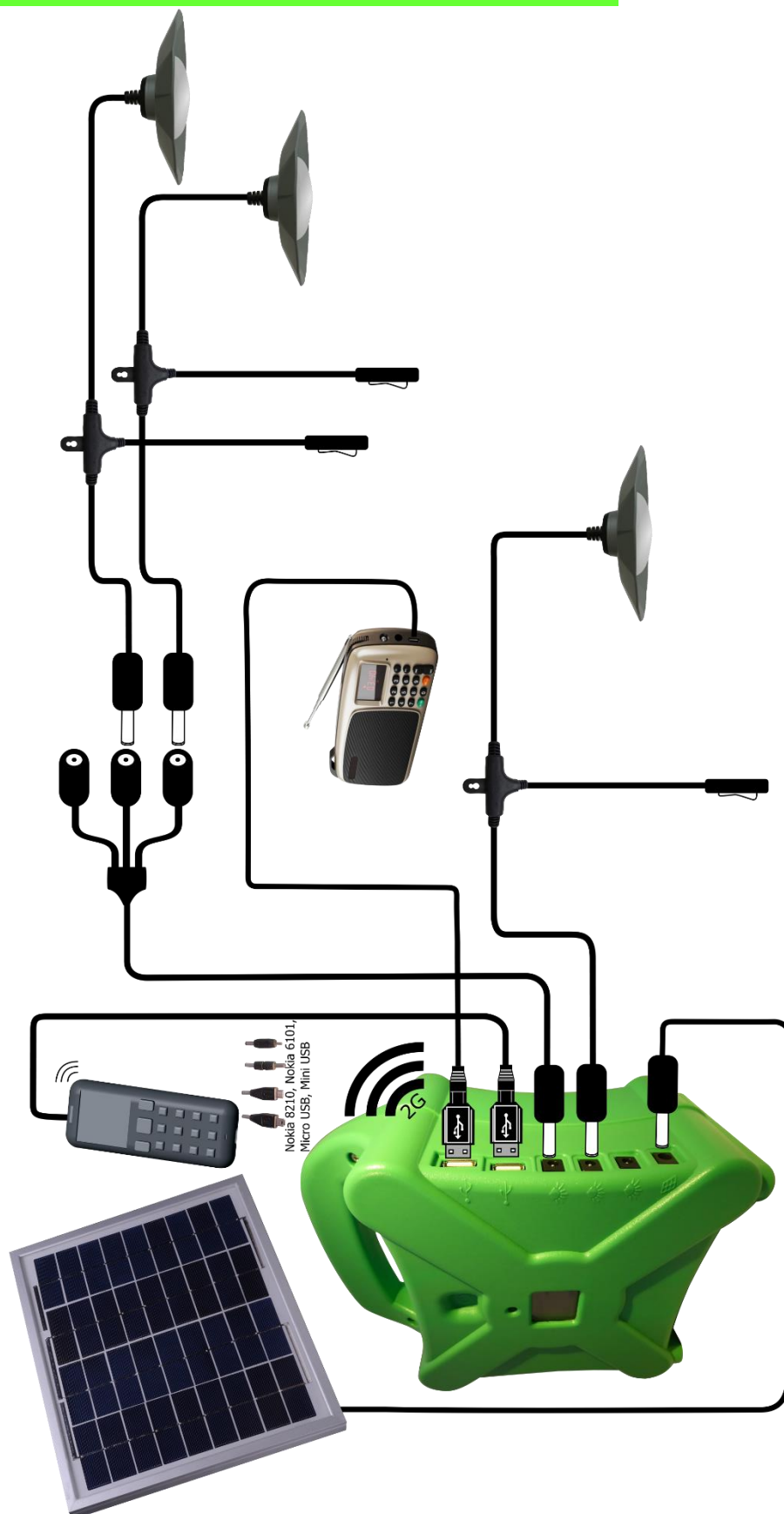
Accessory	Description:	Details	Content:
	Mobile phone adapter	USB wire, 1.5m Adapters: Nokia8210, Nokia 6101, Micro USB, Mini USB	1 pc
	Load distribution wire	Length: 3m, 3 outputs	1 pc
	Remote Connectivity	2G Communication	Option
	PAYG-Ready with Luzhy platform		yes
Values are calculated and can variate according environment conditions			
Product Warranty: 3 years on materials and manufacturing defects			
Operation ambient temperature -20 to +50°C; All values at 25°C ambient temperature			
<b>TTL consumption per day:</b>		66.0 Wh	
<b>Battery autonomy at full battery:</b>		1.35 days	
<b>Daily harvest @ 5kWh/m2/Day up to:</b>		111 Wh	
<b>Daily harvest @ 3kWh/m2/Day up to:</b>		67 Wh	



# Solar Home System Kit LSX07-C1B

3 Lamps

**ZIMPERTEC**



# Solar Home System Kit

## LSX11-C1c

### 4 Lamps



Description:	charging current	load current	Rating:			Content:
Lithium Iron Phosphate battery system with solar charger and LCD display 1 Solar Input, higher power solar panels can be connected, device will limit power draw, several LSX can be connected to one panel; 3 pcs 12V Load Output, Number of outputs can be increased by load distribution wire; 2 USB charging output (max. 1.5A)	5 A	6 A	12.8V	11.0 Ah	140Wh	1 pc

Description of optional Light Points and other Loads:				Individual Lumen Output:		Content:
Light:	Sunflower	2 W	9.0 h	280 lm		2 pc
	Equipped with 5m wire and switch		36 Wh	Individual full battery runtime:	70 hours	
Light:	Sunflower	3 W	8.0 h	420 lm		2 pc
	Equipped with 5m wire and switch		48 Wh	Individual full battery runtime:	47 hours	
Load:	Radio AM/FM	0.50 W	10.0 h			1 pc
			5 Wh	Individual full battery runtime:	280 hours	
Load:	Mobile Phone charging	5.00 W	1.0 h			1 pc
			5 Wh	Individual full battery runtime:	28.0 hours	
	total light point power					10.0 W
	total load power (incl. Light points)					15.5 W
All light points lumen output:						1400 lm
All light points run time after typical day of solar charging						14.0 hours
assume solar day: 5.0 kWh/m2/day						140.0 Wh/day
extra Energy during day time: →						(45 Wh/day)
All lighting points full battery runtime:						14.0 hours

Solar	<b>Description:</b>		<b>Rating:</b>	<b>Content:</b>
	Polycrystalline Silicon Solar Panel Equipped with 6m wire		50 Wp	1 pc = 50 Wp
Accessory	<b>Description:</b>		<b>Details</b>	<b>Content:</b>
	Mobile phone adapter		USB wire, 1.5m Adapters: Nokia8210, Nokia 6101, Micro USB, Mini USB	1 pc
	Load distribution wire		Length: 3m, 3 outputs	1 pc
	Remote Connectivity		2G Communication	Option
	PAYG-Ready with Luzhy platform			yes
Values are calculated and can variate according environment conditions				
Product Warranty: 3 years on materials and manufacturing defects				
Operation ambient temperature -20 to +50°C; All values at 25°C ambient temperature				

<b>TTL consumption per day:</b>	94.0 Wh
<b>Battery autonomy at full battery:</b>	1.49 days
<b>Daily harvest @ 5kWh/m2/Day up to:</b>	185 Wh
<b>Daily harvest @ 3kWh/m2/Day up to:</b>	111 Wh

# Solar Home System Kit

## LSX11-C1c

4 Lamps

**ZIMPERTEC**

