## **Litio Solar Home System Litio-SHSxx**

with LiFePO4 long life battery/ integrated System Installation



- Long Life LiFePO4 Battery 3000cycles
- 12.8V System Voltage
- PWM charger with temperature protection and control
- Display:

Clear and easy to read LCD display for System Status

- Battery SOC by 4 bars
- Left runtime for connected loads
- Charging/Load status
- o Failur status
- Manual load on/off button
- LCD Backlight button
- System Pre-Installed
  - Integrated battery
  - o Integrated Charge controller
  - Integrated Battery Management System
  - Integrated Cell Balancing
  - Battery temperature control
  - Integrated battery emergency protection board for mechanical cut off in failure case (option)
  - Prewired
- Data logging (28days; 12 Months)
- Wire seal possible for avoiding system manipulation
- Optional Pay As You Go function

Transfer payment info by following options possible

- Integrated Keypad enter token code
- Interface transfer
- Options:
  - o Panel and Load air breaker 25Ah only
  - Lockable by Key for avoiding system manipulation
  - Wire seal possible for avoiding system manipulation
  - Wire installation tube adapter for easy wiring
  - Plug&Play







The ALL IN ONE integrated System with its long-life Lithium Iron Phosphate battery can provide excellent and long term energy service to the user. The single battery cell monitoring and control technology, implemented into the Zimpertec Solar Charge Controllers, ensure fast and save charging for best possible battery life time.

Built in terminals for solar panel and load output and air breaker will provide easy and save system installation.

Case with Seal option and Key Lock can avoid user access and system manipulation without notice

info@zimpertec.com

www.zimpertec.com

## Litio-SHSxx



Technical Data:		Litio-SHS25-PWM	Litio-SHS50-PWM
Battery:			
	Type:	LiFePO4	
	Capacity:	25Ah	50Ah
	Nominal Voltage:	12.8V (4 cells in Series, 3.2V each)	
	Life time:	>3000 cycles (100%DOD) at 0.5C	

Battery protection:			
	Emergency cut off	Battery disconnect at critical conditions which can reduce battery life or destroy battery:	
		if too high battery voltage	
		if too low battery voltage	
		(can only be reset by service staff, not by user)	

harge Controller			
Charge Control Type:	PWM serial control with reverse current protection by Mos-Fet with Battery temperature control system		
Charge Current:	10A	20A	
Control Algorithm:	Optimized for LiFePO4 batteries with single cell charge control		
Panel Voc:	Max 25V		
Load Control Type:	Mos-Fet with additional reverse Mos-Fet	for wrong battery polarity protection and	
	Free Wheeling Diode; 2 sets of load output terminal		
Load Current:	10A	20A	
Protection	Over load, over temperature, reverse polarity, surge protection by Varistor		
Others:	Manual load on/off button, backlight on button		
Display	LCD with SOC, remaining load runtime at battery status, Status, Load status, Failure status		
	Paid days (PaYG option)		
	Backlight for LCD		
Battery Management	cell balancing, cell monitoring, Battery temperature monitoring		
System:	End of Charge Voltage: 3.55V/cell		
	End of Discharge Voltage: 2.65V/cell		
	Load Reconnect Level: ca. >20% SOC		
USB Charging:	5V/1.5A USB charger		
	2*USB-A socket		
Datalogger: Information for 28 days + 12 Months Datalogger		+ 12 Months Datalogger	

Installation box:		
Box Dimensions	Ca. 360*270*160mm	
Charge controller	ge controller Front Panel type	
Load Switch	Manual Load ON/OFF Switch	
Load Terminal	4 * Barrel socket: 4.7/1.7mm	
	Inside the System box: 4mm Screw at terminal for lug or fork crimp terminal	
	installation	
Battery terminal	Connect by plug to Charge Controller (battery built into the assembly box)	
Panel terminal	4mm Solar terminal	
	(Internal connection: 4mm Screw at terminal for lug or fork crimp terminal installation)	
USB Data Interface	USB A socket for Configuration and Data-Logger read out option	
	Only for Zimpertec Interface adapter	
Protection:	Option: only for 25Ah	
	Panel input: double circuit breaker 10A (thermomagnetic)	
	Load output: double circuit breaker 20A (thermomagnetic)	
Option:	Pay as You Go: For transfer PAYG days:	
	Keypad with 09 numbers confirm and delete buttons	

Version: DATASHEET-LITIO-SHSXX-2021-03-24

Subject to change without notice