

- 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
 - Failure status
- Manual load on/off button
- LCD Backlight button
- System Pre-Installed
 - Integrated battery
 - 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:
 - 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.

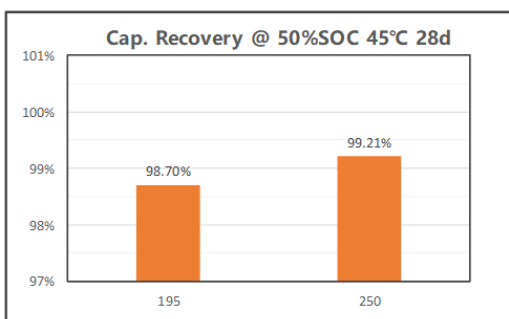
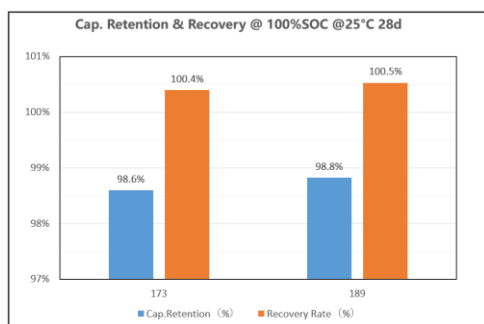
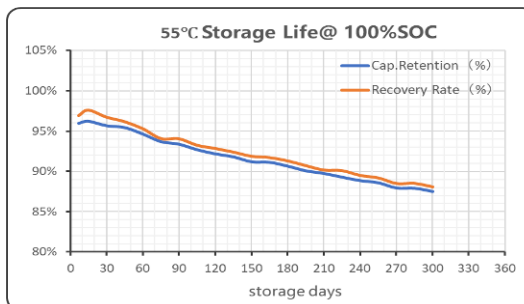
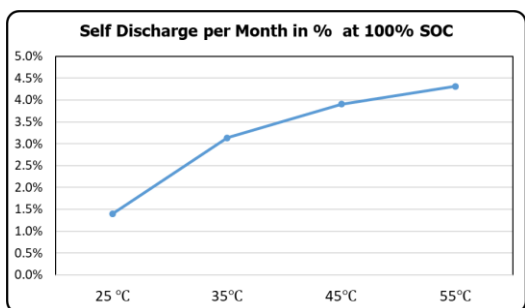
Built in terminals for solar panel and load output and air breaker will provide easy and save system installation.

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

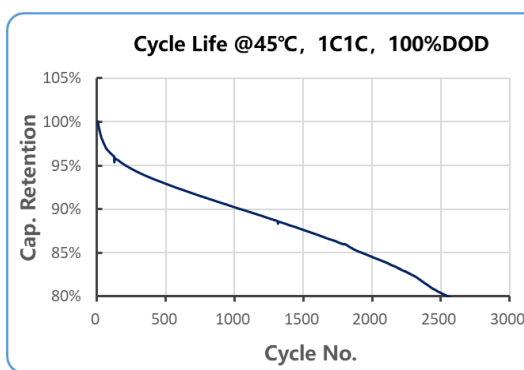
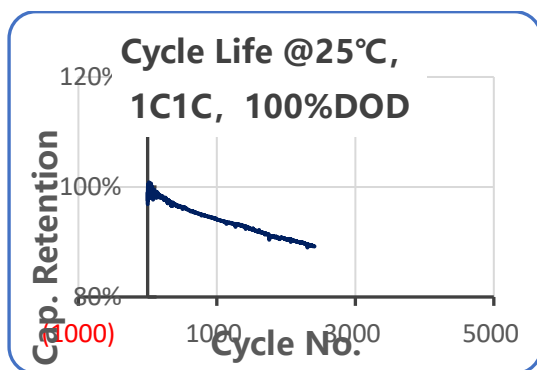
Technical Data:		Litio-SHS25	Litio-SHS50
Battery:			
Type:	LiFePO4		
Capacity:	25Ah	50Ah	
Nominal Voltage:	12.8V (4 cells in Series, 3.2V each)		
Life time:	>3000 cycles (100%DOD) at 0.5C		
Battery protection:			
Emergency cut off	Battery disconnect at critical conditions which can reduce battery life or destroy battery: <ul style="list-style-type: none"> • if too high battery voltage • if too low battery voltage (can only be reset by service staff, not by user)		
Charge 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 peak)	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 System:	cell balancing, cell monitoring, Battery temperature monitoring 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		
Installation box:			
Box Dimensions	Ca. 360*270*160mm		
Charge controller	Front Panel type		
Load Switch	Manual Load ON/OFF Switch		
Load Terminal	4 * Barrel socket: 4.7/1.7mm SAE terminal 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		
Option:	Pay as You Go: For transfer PAYG days: Keypad with 0..9 numbers confirm and delete buttons		

Battery cell information:

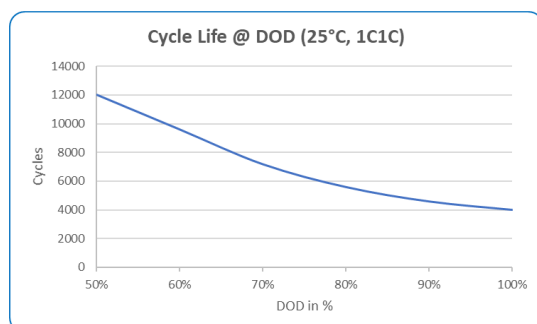
Self-discharge / Graph of variation of capacity versus storage time



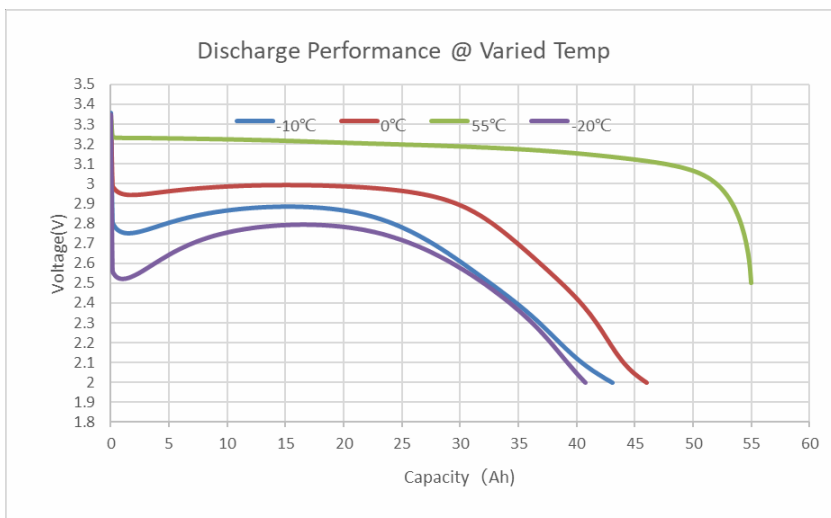
Cycle Live versus Temperature:



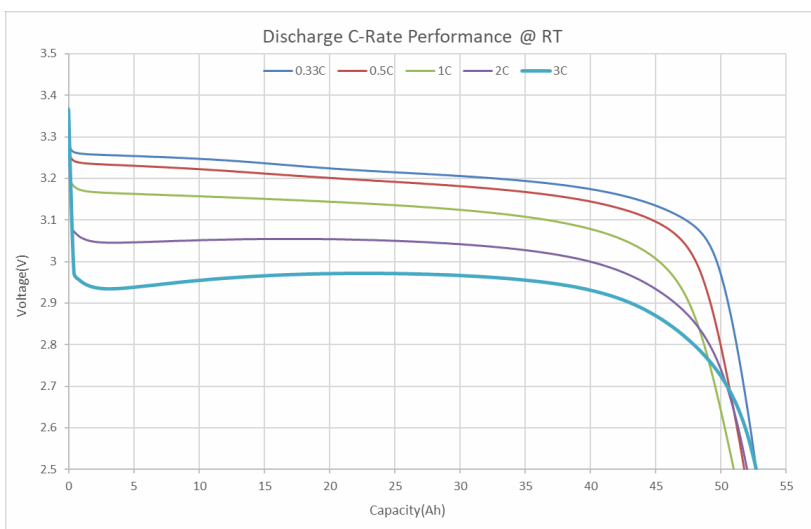
Cycle Live versus Deep of Discharge (DOD)



Graph of variation of capacity versus ambient temperature



Capacity versus Discharge Rate (at 25°C per cell, Values Voltage Battery pack *4)



Charge Performance versus Charge Rate

