SUNPAK-V 15

MOVABLE HOME ENERGY STORAGE

INTRODUCTION

Home energy storage using high quality catl lithium battery cell, equipped with BMS battery management system, mainly used in small capacity home energy storage , there are 100ah , 150ah, 200ah, 250ah and other capacity options , up to more than 10 years of service life , lightweight design , efficient power



SUNPAK-V 15

APPLICATION

Solar Energy

Residential Area

Industrial Area

New Energy Vehicle

VALUE

More Usable Energy
90% Depth of Discharge
Pack Level Energy Optimization

Easy Installation
Standard design with helpful pulling ear quick stacking

Smart BMS system
Each module is equipped with an independent BMS system

Longer Lifetime
6000 cycles, 10 years design life

Safe & Reliable
Safe lithium iron phosphate cell

Modular design
Compact size and light weight

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ELECTRIAL CHARACTERISTICS

Project		Description
Basic Parameter	Battery Type	LifePO4(Iron Phosphate Battery)
	Total Energy Capacity	15.3 kWh
	Usable Energy Capacity	15.3 kWh
	Battery Capacity	300Ah
	Operating Voltage Capacity	47 to 55 V DC
	Nominal Voltage	51.2 V DC
	Charge/Discharge Current	200A
	Max. Charge/Discharge Power	15kW
	Battery Pack Round-Trip Efficiency	>95% (under specific condition)
	Communication Interface	CAN 、 RS232、RS485
	DC Disconnect	Circuit Breaker, Contactor, Fuse
	Battery Discharge Rate	0.5C
	Expected Life Time	10 years
	Calendar Life(cycles)	6000@25℃, 90%DOD
	Cell Type	LifePO4(LFP,Iron Phosphate Lithium Battery)
	Cell Nominal Voltage	3.2V
	Cell Combination Method	1P16S
	Recommend Charging Voltage	55V
	Recommend Discharging Cutoff Voltage	47V
	Internal Resistance	0.3mΩ
	Charging Rate	0.5C
	Standard Charging Current	150A
	Max Charging/Discharging Current	200A
	Discharge Rate	0.33C
	Standard Discharging Current	150A
	Max Discharging Current	200A
	Scalability	≤15 Units in Parallel
	Pros	Can be Used in Both Off-grid and Hybrid Setups,Compact Design,LCD Screen
	Monitoring & Protection	Built-in BMS,Breaker Embedded in System
	Design Life Time	10 Years

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OPERATING CONDITION

Project		Description
Environment	Installation Location	Indoor / Outdoor (Wall-mounted / Floor Standing)
	Operating Temperature	-10 to 50°C
	Operating Temperature(Recommended)	15 to 30°C
	Storage Temperature	-30 to 60°C : acceptable for 7 days in total -20 to 45°C : acceptable for the first 6 months -20 to 30°C : acceptable for 7th ~12th month
	Humidity	5% to 95%
	Altitude	Max.2,000 m
	Cooling Strategy	Natural Convection
	Alarms	Overcharge, Over-discharge, Over-current, Over-temperature, Short Circuit
	Protection Level	IP30

CERTIFICATION

Project		Description
Guarantee	Safety	Cell UL1642
		Battery Pack IEC62619 /IEC60950(LVD) / CE
	Emissions	IEC61000-6-1, IEC61000-6-3
	Hazardous Materials	Classification Class 9
	Transportation	UN38.3

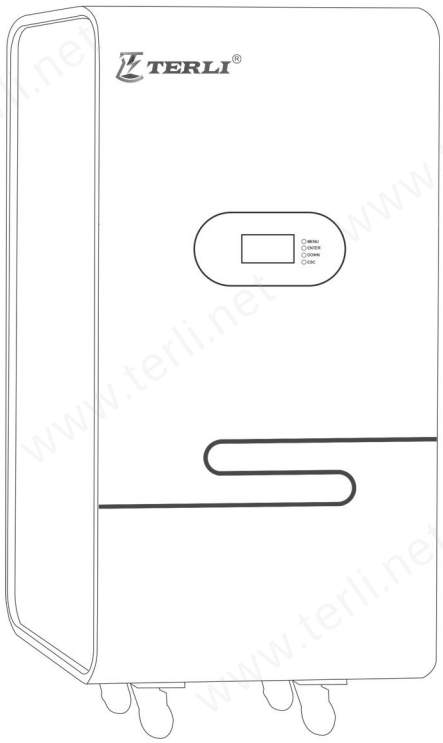
※ Test Conditions - Temperature 25°C, at the beginning of life

※ Total Energy is measured under specific condition from LC (0.3CCCV/0.3CC)

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MECHANICAL CHARACTERISTICS

		Battery	Package
Dimensions	Length	750mm	800mm
	Width	466mm	500mm
	Height	250mm	300mm
Weight		113kg	120kg
Color		White	

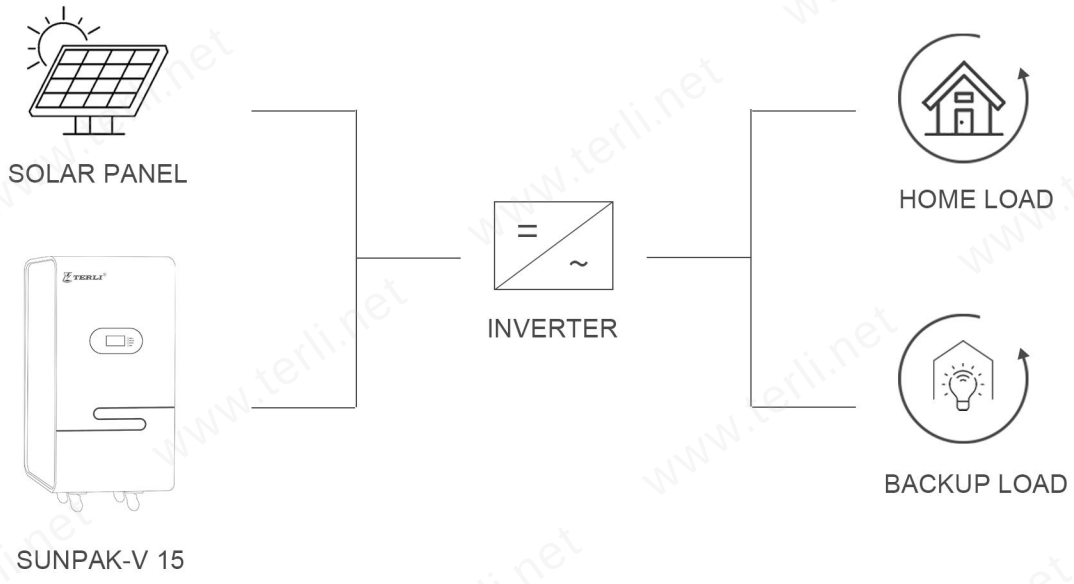


COMPATIBLE STORAGE INVERTERS WITH SUNPAK-V 15

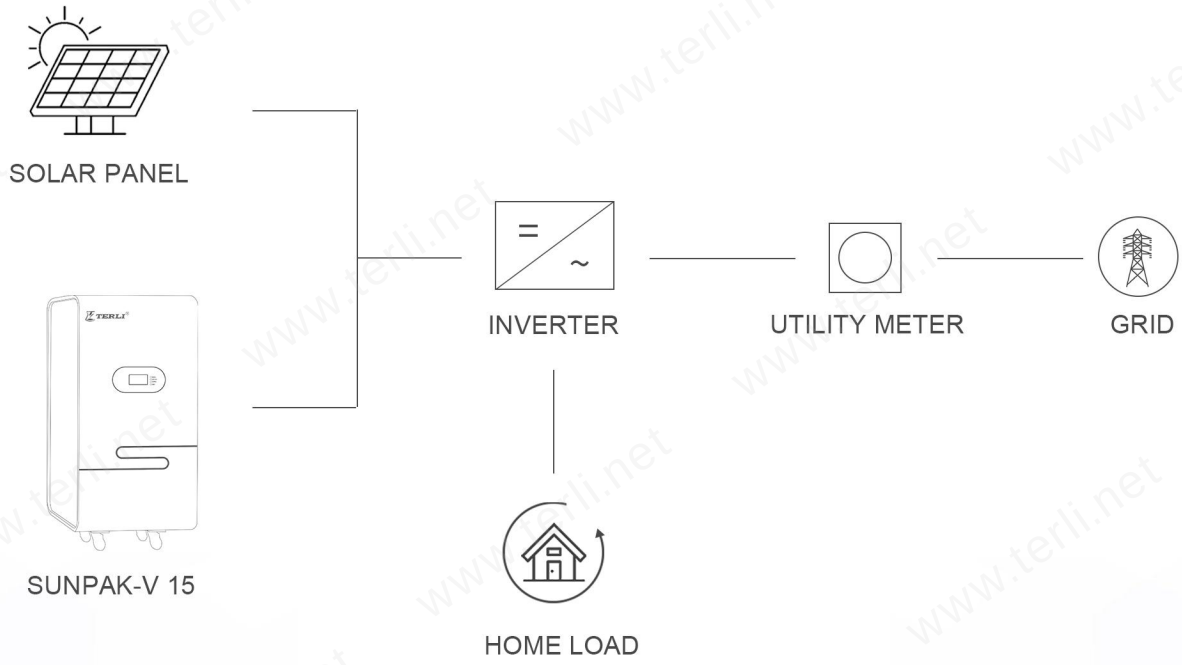
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victron energy BLUE POWER SERMATEC LUX POWER TEK
精石科技 GSSTES SMA GOODWE SOROTEC Power Solutions Expert

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OFF-GRID SYSTEM

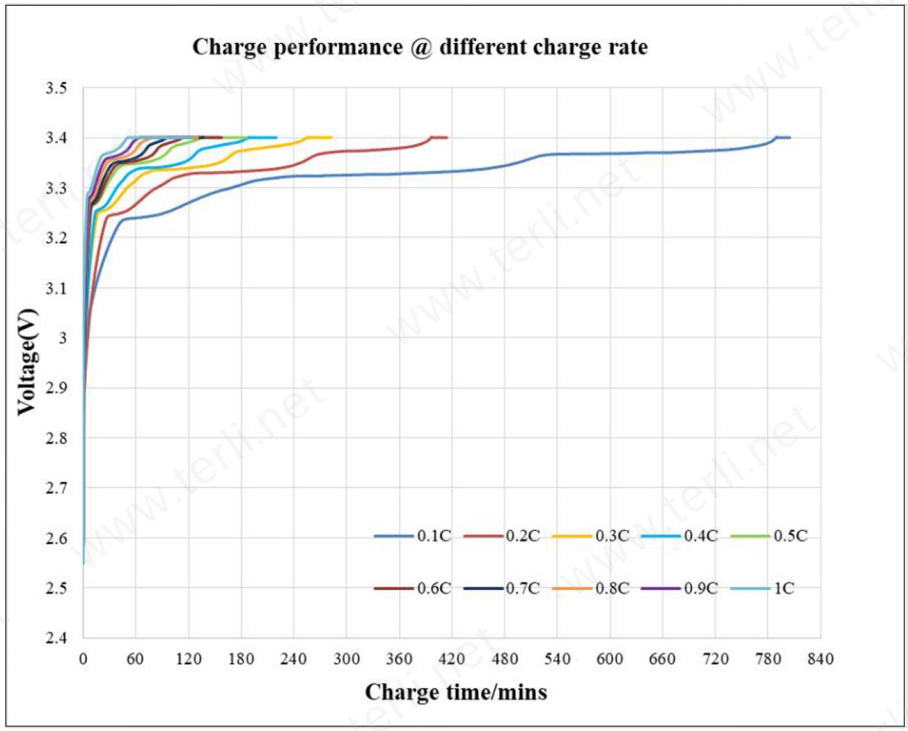


HYBRID SYSTEM

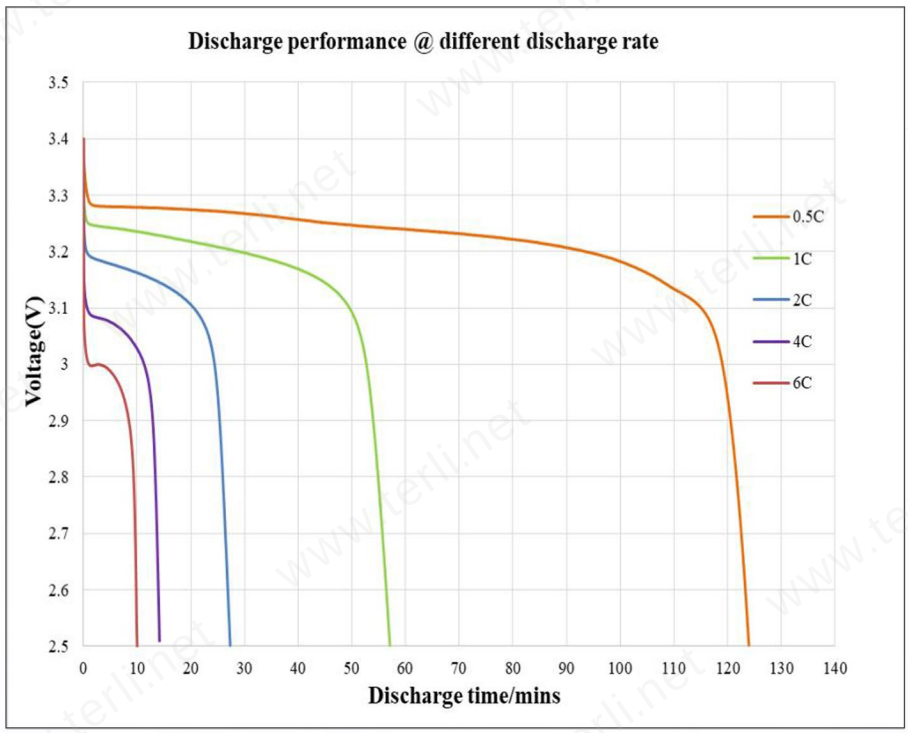


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CHARGING CURVES UNDER DIFFERENT CHARGING RATES

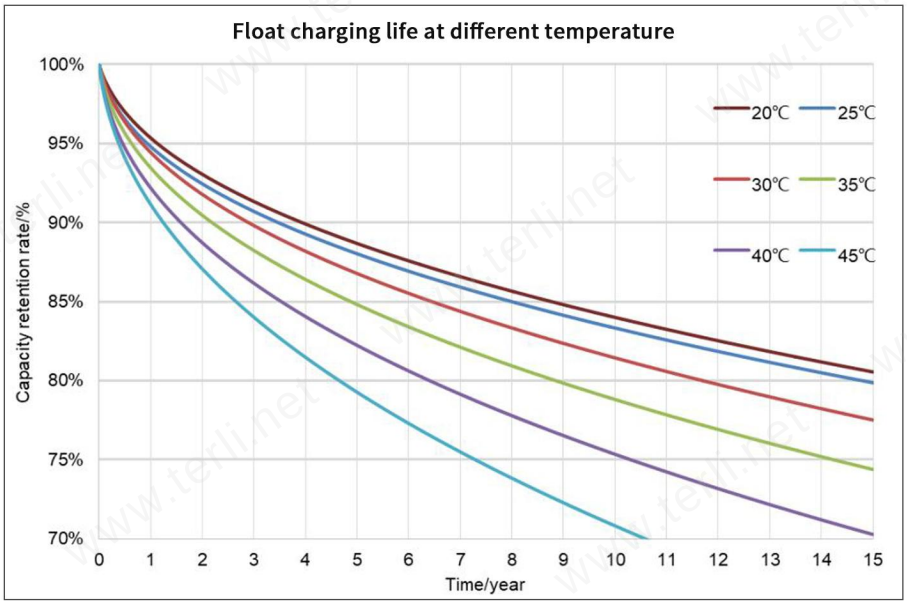


DISCHARGE CURVE UNDER DIFFERENT DISCHARGE RATES

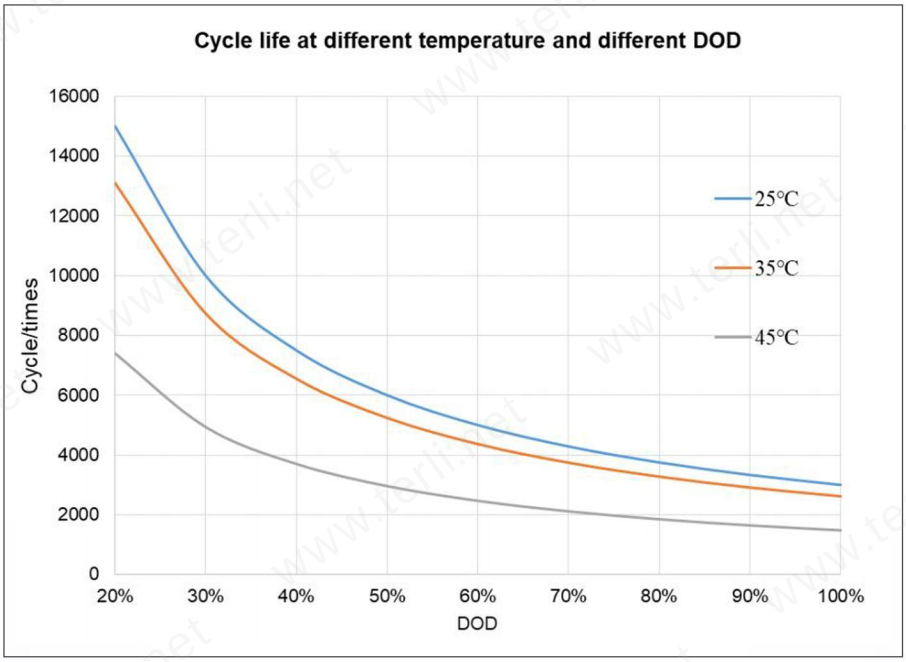


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FLOATING CHARGING LIFE CURVES AT DIFFERENT TEMPERATURES



CYCLE LIFE CURVES AT DIFFERENT TEMPERATURES AND DOD CONDITIONS



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