

GAIA-S 5 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

APPLICATION



Solar Energy



Residential Area



Industrial Area



New Energy Vehicle



GAIA-S 5

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

ELECTRIAL CHARACTERISTICS

Project	Description	
Basic Parameter	Battery Type	LifePO4(Iron Phosphate Battery)
	Total Energy Capacity	5.12 kWh
	Usable Energy Capacity	5.12 kWh
	Battery Capacity	100Ah
	Operating Voltage Capacity	47 to 55 V DC
	Nominal Voltage	51.2V DC
	Charge/Discharge Current	100A
	Max. Charge/Discharge Power	5kW
	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°C, 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	60A
	Max Charging/Discharging Current	100A
	Discharge Rate	0.5C
	Standard Discharging Current	60A
	Max Discharging Current	100A
	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

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

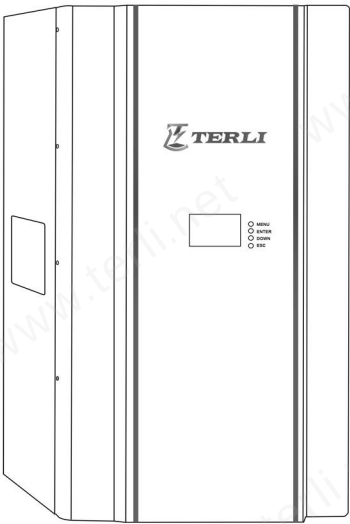
CERTIFICATION

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)

MECHANICAL CHARACTERISTICS

		Battery	Package
Dimensions	Length	623mm	700mm
	Width	400mm	450mm
	Height	263mm	300mm
Weight		50.5kg	52kg
Color		White	



COMPATIBLE STORAGE INVERTERS WITH GAIA-S 5





SRNE 碩日



德業





victron energy
BLUE POWER





LU X POWER^{TEK}





精石科技
GSSTES



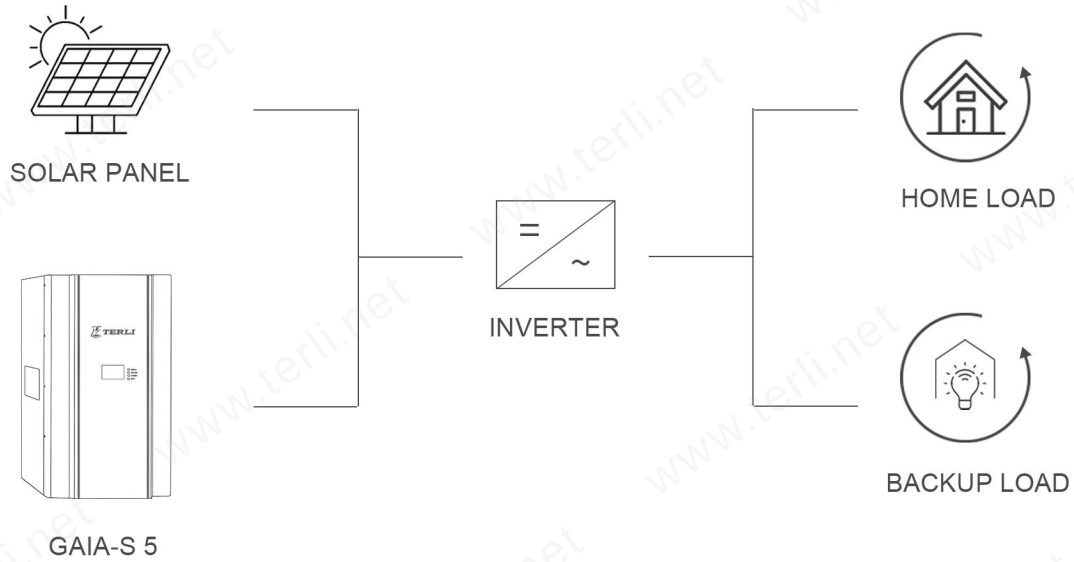


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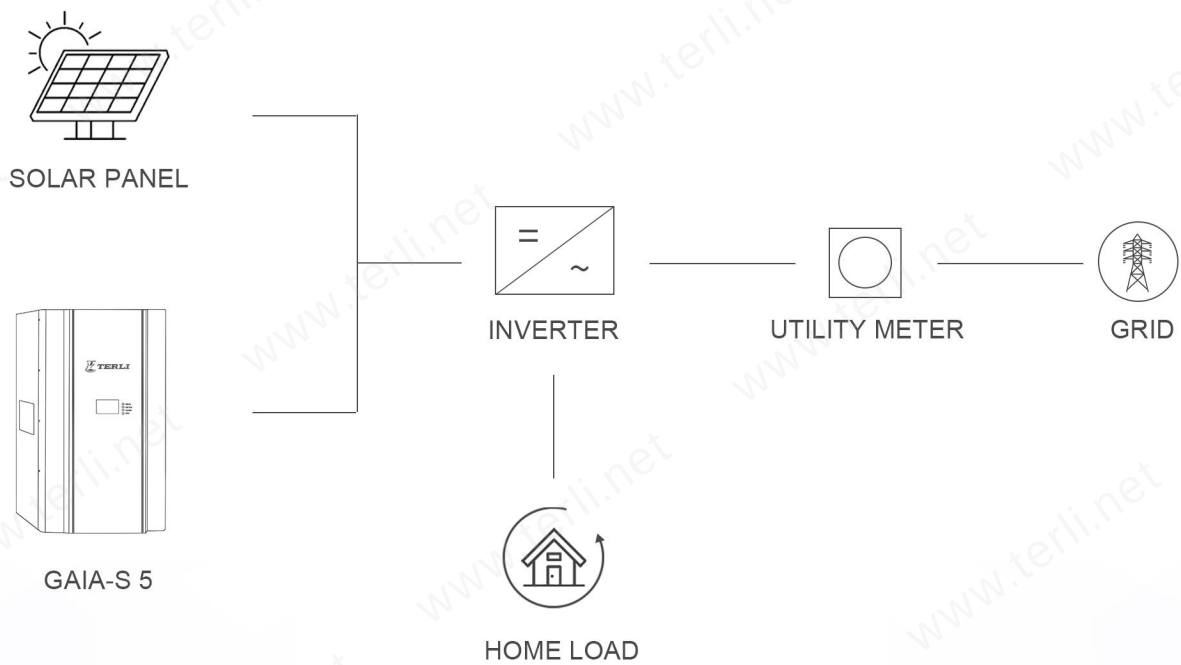


Power Solutions Expert

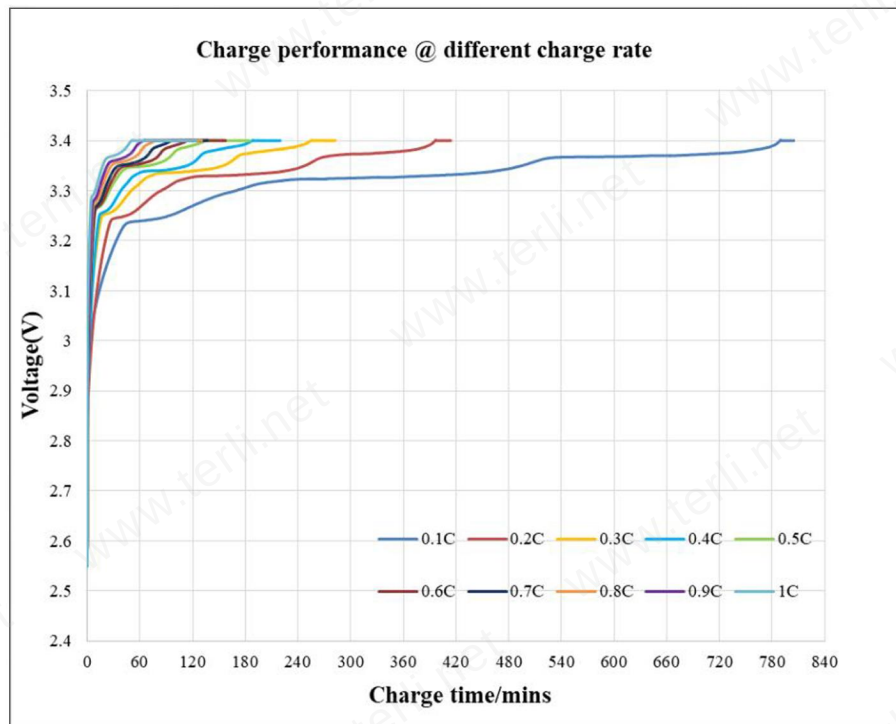
OFF-GRID SYSTEM



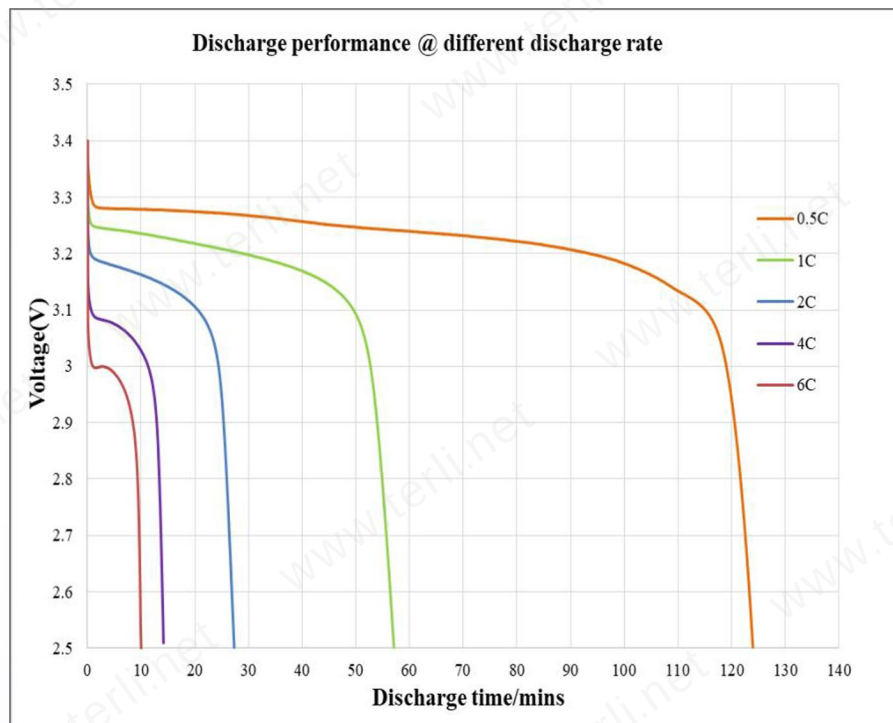
HYBRID SYSTEM



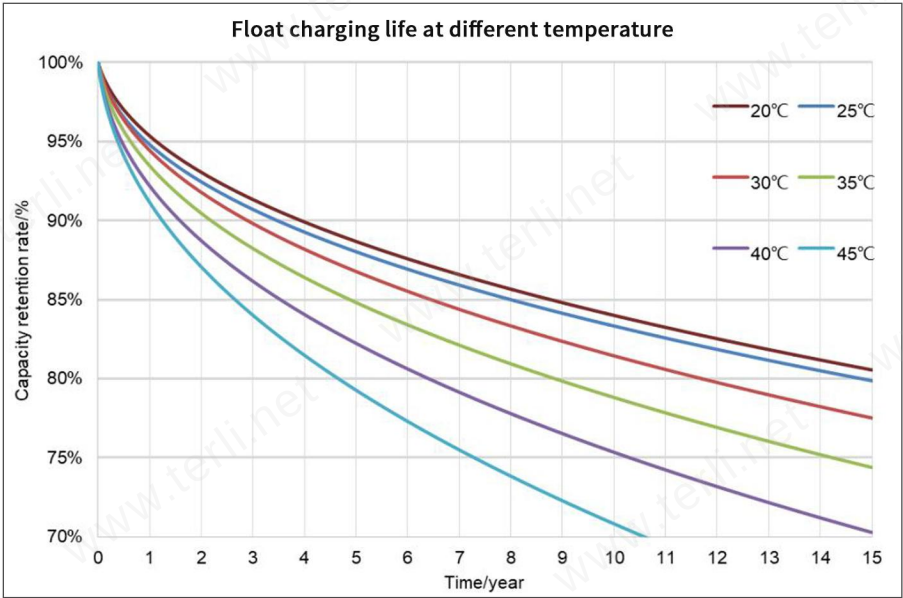
CHARGING CURVES UNDER DIFFERENT CHARGING RATES



DISCHARGE CURVE UNDER DIFFERENT DISCHARGE RATES



FLOATING CHARGING LIFE CURVES AT DIFFERENT TEMPERATURES



CYCLE LIFE CURVES AT DIFFERENT TEMPERATURES AND DOD CONDITIONS

