

24V LIFEPO4 BATTERY BATTERY PACK



INTRODUCTION

12 V / 24V / 48 V battery adopts catl lithium battery cell, equipped with bms power management system, providing the best power supply solution , longer service life , lightweight design, and more efficient power for different machine interior

APPLICATION



Forklift



Ship



Residential Area



Industrial Area



24 V Battery

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	Model	24V	
	Battery Type	LifePO4(iron Phosphate Battery)	
	Battery Module	TY-24-150	TY-24-200
	Battery Capacity	150Ah	200Ah
	Nominal Battery Energy	3.6kWh	4.8kWh
	Norninal Voltage	25.6V	
	Norminal Output Current	75A	100A
	Working Voltage	22.4~29.2V	
	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	16S1P	
	Recommend Charging Voltage	58.4V	
	Recommend Discharging Cutoff Voltage	44.8V	
	Internal Resistance	0.3mΩ	
	Charging Rate	0.5C	
	Standard Charging Current	50A~60A	
	Max Charging/Discharging Current	60A,100A	
	Discharge Rate	0.5C	
	Standard Discharging Current	50A,100A	
	Max Discharging Current	50A,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	Machine Interior
	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

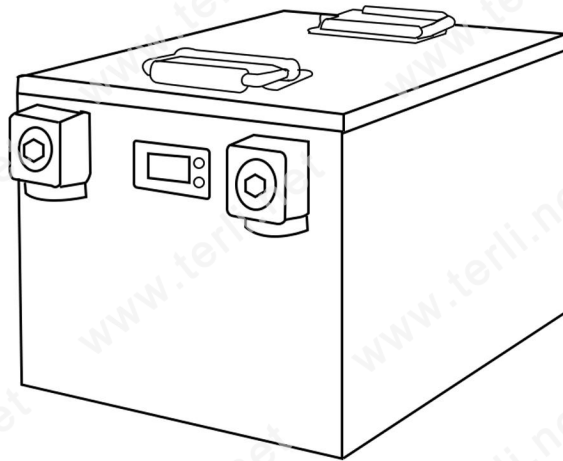
CERTIFICATION

Project		Description
Guarantee	Safety	Celi 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	430mm	410mm	470mm	450mm
	Width	210mm	290mm	250mm	330mm
	Height	210mm	210mm	250mm	330mm
Weight		29.8Kg	36Kg	32Kg	40Kg
Color	Black/White				



COMPATIBLE STORAGE INVERTERS WITH 24V BATTERY

GROWATT

SRNE 碩日

Deye 德業

MEGAREVO

victtron energy
BLUE POWER

SERMATEC

LU X POWER TEK



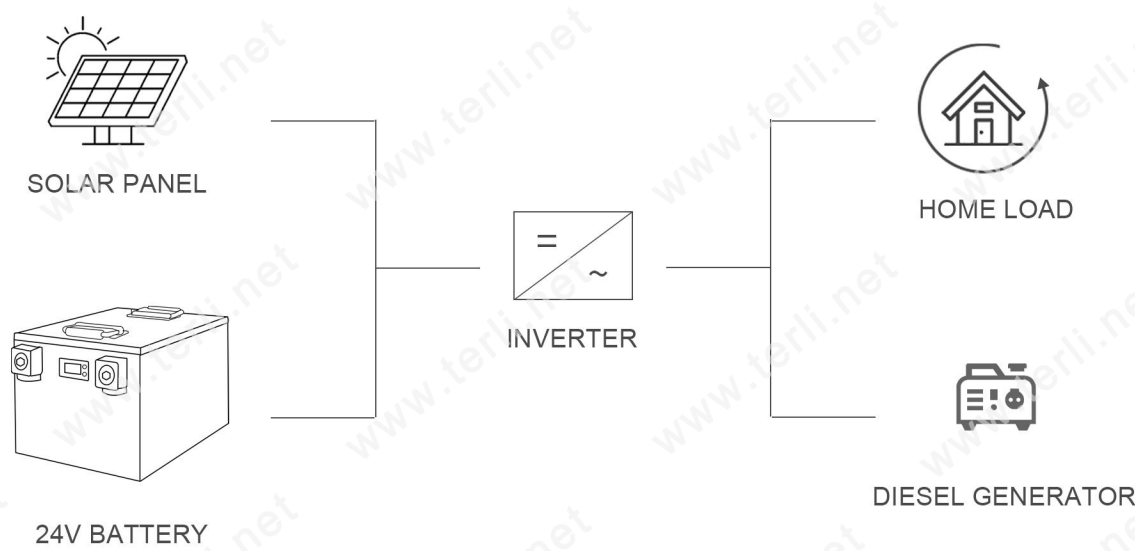
GSSE 精石科技
GSSTES

SMA

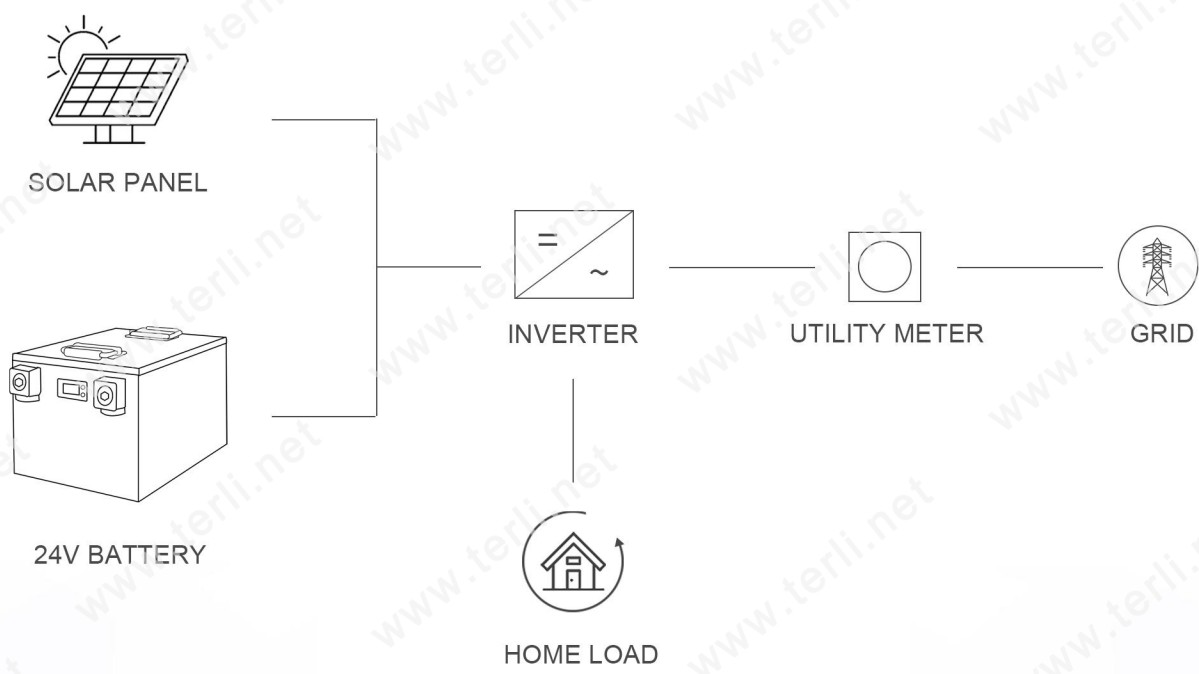
GOODWE

SOROTEC
Power Solutions Expert

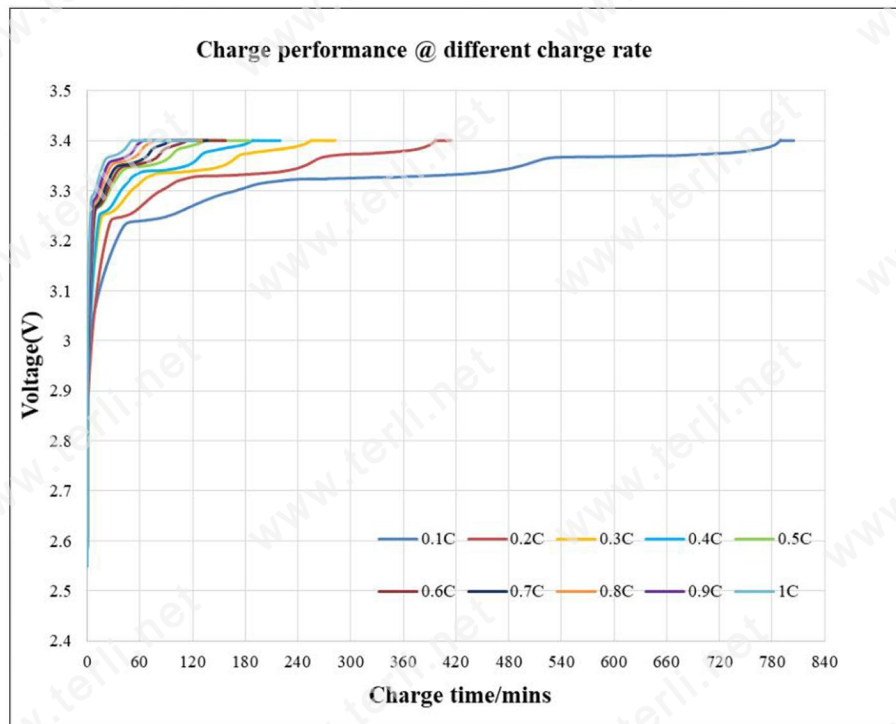
ON-GRID SYSTEM



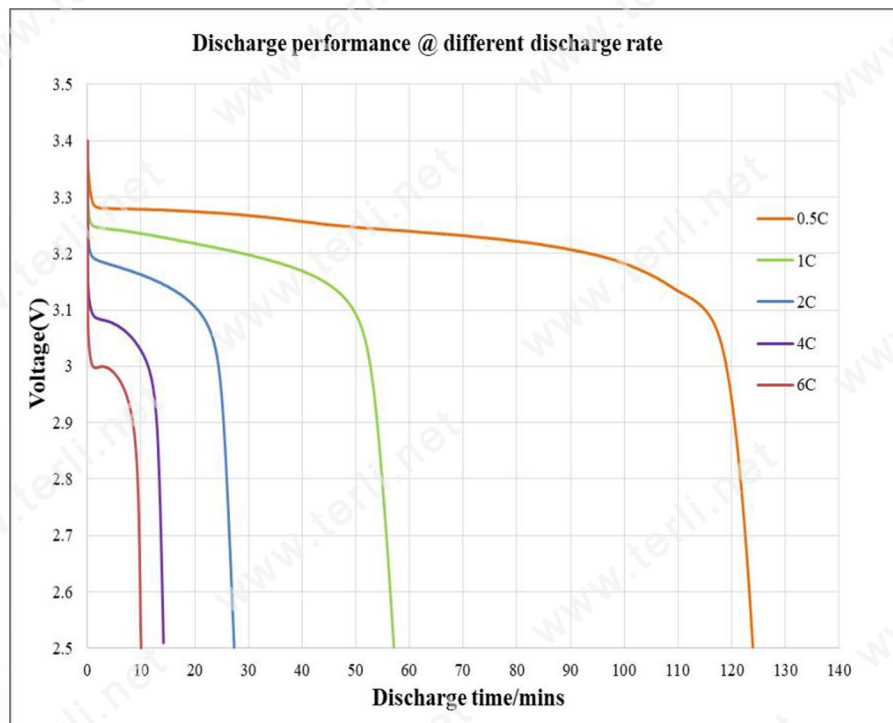
OFF-GRID SYSTEM



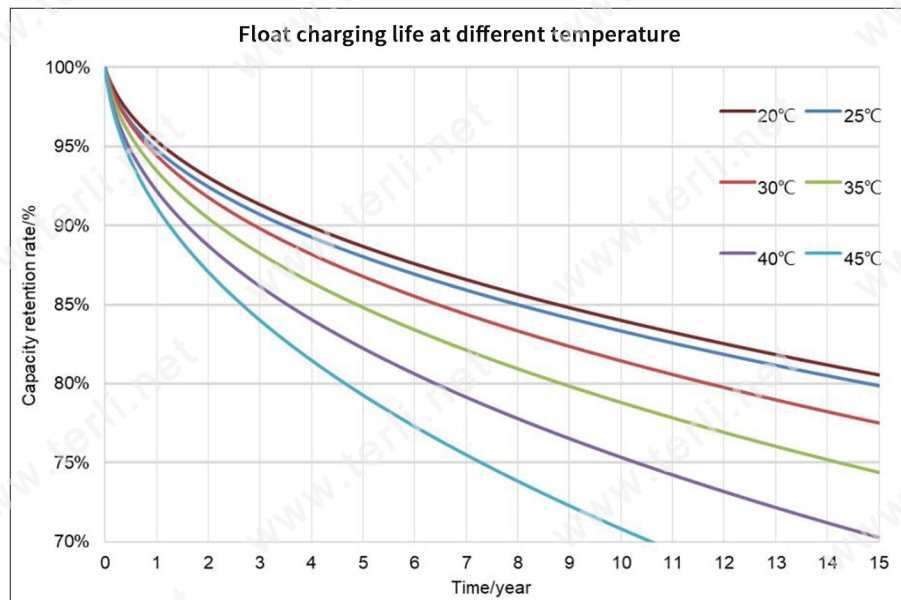
CHARGING CURVES UNDER DIFFERENT CHARGING RATES



DISCHARGE CURVE UNDER DIFFERENT DISCHARGE RATES



FLOATING CHARGING LIFE CURVES AT DIFFERENT TEMPERATURES



CYCLE LIFE CURVES AT DIFFERENT TEMPERATURES AND DOD CONDITIONS

