GudE Potencia



GEPL SERIES LITHIUM ION BATTERY

AN IDEAL REPLACEMENT OF LEAD ACID BATTERY

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GENERAL INTRODUCTION

GudE Potencia GEPL series Lithium Ion Battery is an ideal replacement of traditional lead acid battery utilizing advanced LiFePO4 technology and integrated BMS with the benefits of long cycle life, light in weight, safety and excellent high and low temperature performance. GEPL Series Lithium-ion Battery is widely used in solar power system, home energy storage system, emergency power and other lead acid battery replacement.



FEATURES

- **LONG CYCLIC LIFE.** By utlizing proven LFP battery cells, the battery can provides 2000+ cycles life at standard working conditions, which is 3-4 times better than traditional lead acid battery.
- **HIGH SAFETY.** Integrated intelligent BMS protects the battery cells from over-charge, over-discharge, high temperature, short-circuit,etc. to ensure the battery high safety.
- **HIGH ENERGY DENSITY.** By using high capacity LFP battery cells and optimized structural design, the battery can reach 100Wh/Kg - 110Wh/Kg energy density which is 3X better than traditional lead acid batteries.
- **EXTENDABLE CAPACITY.** Supported by power electronics in BMS, several batteries be connected to reach high capacity and higher voltage which is required in many occasions - supporting Max. 4 units parallel and series connection
- **ENVIORNMENT FRIENDLY.** All components are manufactured by environment friendly materials to make the battery has no harm to our environment.

APPLICATIONS



Solar Home Power System



Solar Street Lighting System

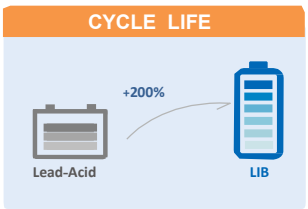


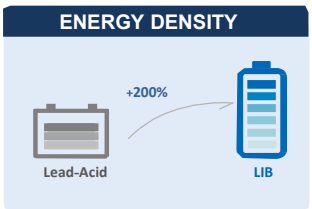
UPS Power Supply System

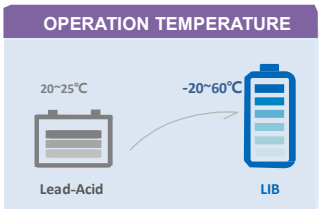


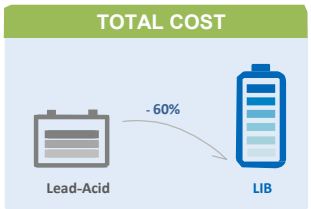
Emergency Power Supply

ADVANTAGES









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GENERAL SPECIFICATIONS

Model No.	Nominal Voltage (V)	Nominal Capacity (Ah)	Dimension (W X D X H, mm)	Nominal Weight (Kgs)	Charge Voltage (V)	Discharge Cut-off Voltage (V)	Standard Ch./Disch. Current (A)	Max. Ch./Disch. Current (A)	Protection Parameters			
									Over-Ch. Current (A)	Over-Ch. Voltage (V per Cell)	Over-Disch. Voltage (V per Cell)	Over-Temp. (℃)
12GEPL5.5	12.8V	5.5Ah	65 X 152 X 97 (±2)	0.8 Kgs	14.6V (±0.2)	10V	2.75A	5.5A	10A	3.65VPC	2.3VPC	65°C
12GEPL12	12.8V	12Ah	99 X 151 X 99 (±2)	1.4 Kgs	14.6V (±0.2)	10V	6A	12A	15A	3.65V	2.3V	65°C
12GEPL18	12.8V	18Ah	77 X 181 X 170 (±2)	2.9 Kgs	14.6V (±0.2)	10V	9A	18A	25A	3.65V	2.3V	65°C
12GEPL24	12.8V	24Ah	77 X 181 X 170 (±2)	3.0 Kgs	14.6V (±0.2)	10V	12A	24A	30A	3.65V	2.3V	65°C
12GEPL30	12.8V	30Ah	95 X 223 X 175 (±2)	3.7 Kgs	14.6V (±0.2)	10V	15A	30A	35A	3.65V	2.3V	65°C
12GEPL42	12.8V	42Ah	166 X 198 X 170 (±2)	4.3 Kgs	14.6V (±0.2)	10V	21A	42A	45A	3.65V	2.3V	65°C
12GEPL55	12.8V	55Ah	138 X 229 X 208 (±2)	5.5 Kgs	14.6V (±0.2)	10V	27.5A	55A	60A	3.65V	2.3V	65°C
12GEPL60	12.8V	60Ah	138 X 229 X 208 (±2)	6.8 Kgs	14.6V (±0.2)	10V	30A	60A	70A	3.65V	2.3V	65°C
12GEPL77	12.8V	77Ah	168 X 260 X 209 (±2)	9.8 Kgs	14.6V (±0.2)	10V	38.5A	77A	85A	3.65V	2.3V	65°C
12GEPL80	12.8V	80Ah	168 X 260 X 209 (±2)	10.2 Kgs	14.6V (±0.2)	10V	40A	80A	90A	3.65V	2.3V	65°C
12GEPL100	12.8V	100Ah	175 X 330 X 216 (±2)	12 Kgs	14.6V (±0.2)	10V	50A	100A	130A	3.65V	2.3V	65°C
12GEPL150	12.8V	150Ah	176 X 333 X 217 (±2)	15 Kgs	14.6V (±0.2)	10V	50A	100A	130A	3.65V	2.3V	65°C
12GEPL200	12.8V	200Ah	240 X 522 X 218 (±2)	22 Kgs	14.6V (±0.2)	10V	50A	100A	130A	3.65V	2.3V	65°C
12GEPL300	12.8V	300Ah	269 X 520 X 220 (±2)	28 Kgs	14.6V (±0.2)	10V	50A	100A	130A	3.65V	2.3V	65°C
25GEPL5.5	25.6V	5.5Ah	151 X 99 X 99 (±2)	1.2 Kgs	29.2V (±0.2)	20V	2.75A	5.5A	10A	3.65V	2.5V	65°C
25GEPL11	25.6V	11Ah	77 X 181 X 170 (±2)	2.5 Kgs	29.2V (±0.2)	20V	5.5A	11A	20A	3.65V	2.5V	65°C
25GEPL22	25.6V	22Ah	166 X 198 X 170 (±2)	4.3 Kgs	29.2V (±0.2)	20V	11A	22A	30A	3.65V	2.5V	65°C
25GEPL30	25.6V	30Ah	138 X 229 X 208 (±2)	6.8 Kgs	29.2V (±0.2)	20V	15A	30A	40A	3.65V	2.5V	65°C
25GEPL42	25.6V	42Ah	168 X 260 X 209 (±2)	10.5 Kgs	29.2V (±0.2)	20V	21A	42A	55A	3.65V	2.5V	65°C
25GEPL50	25.6V	50Ah	175 X 330 X 216 (±2)	12 Kgs	29.2V (±0.2)	20V	25A	50A	60A	3.65V	2.5V	65°C
25GEPL60	25.6V	60Ah	173 X 406 X 236	13.5 Kgs	29.2V (±0.2)	20V	30A	60A	70A	3.65V	2.5V	65°C
25GEPL80	25.6V	80Ah	176 X 333 X 217 (±2)	15 Kgs	29.2V (±0.2)	20V	40A	80A	90A	3.65V	2.5V	65°C
25GEPL100	25.6V	100Ah	240 X 522 X 218 (±2)	22 Kgs	29.2V (±0.2)	20V	50A	100A	130A	3.65V	2.5V	65°C
25GEPL150	25.6V	150Ah	269 X 520 X 220 (±2)	28 Kgs	29.2V (±0.2)	20V	50A	100A	130A	3.65V	2.5V	65°C

TECHNICAL PARAMETERS

Cycle Life @ 0.2C Charge/Discharge, 25℃, 80% DOD	2000+ Cycles
Efficiency of Charge @ 0.5C	100%
Efficiency of Discharge @ 1C	96% - 99%
Charge Mode	0.2C to 14.6V, then constant voltage 14.6V till charge current to 0.02C
Monthly Self-Discharge	Less than 2% per month
Maximum No. of Batteries can be connected in Series and in Parallel	4S or 4P

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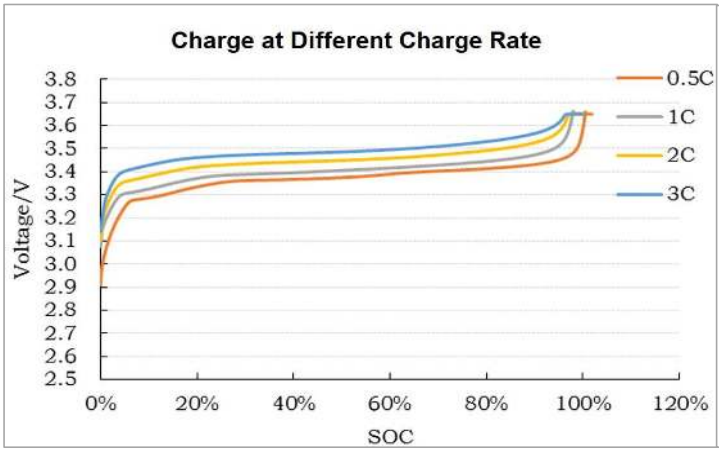
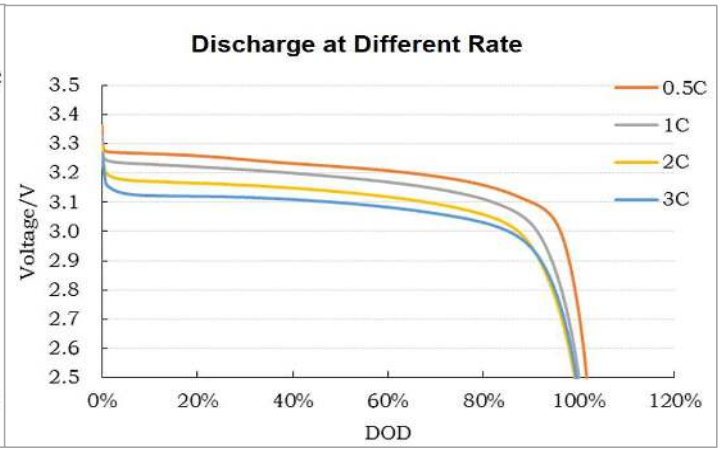
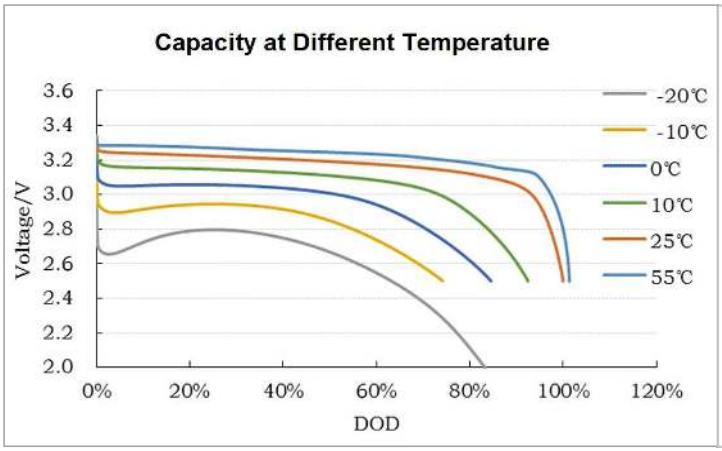
OPERATION ENVIRONMENT

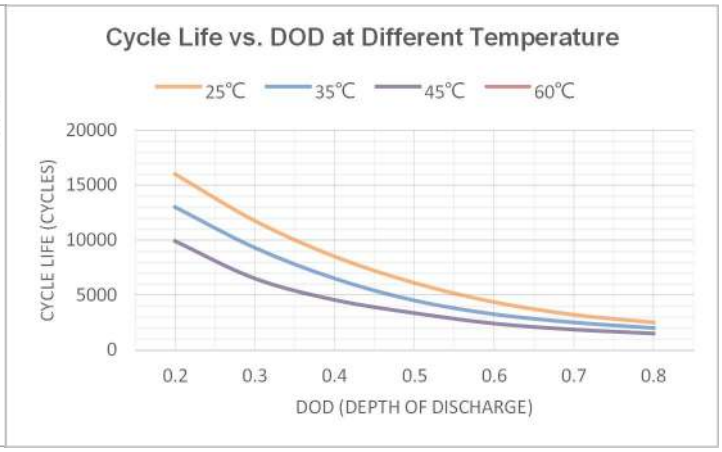
Charge Temperature Range	0°C ~ 45°C (32°F ~ 113°F)
Discharge Temperature Range	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature Range	0°C ~ 45°C (32°F ~ 113°F)
IP Class	IP55
Operation Humidity Range	5% ~ 95%
Operation Altitude	Less than 4000m

PERFORMANCE CURVES









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