GudE Potencia

GEPT SERIES LITHIUM ION BATTERY

FOR LOW DC VOLTAGE APPLICATIONS

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GENERAL INTRODUCTION

GudE Potencia GEPT series Lithium Ion Battery is designed for stationary energy storage applications including telecom standby, residential and commercial energy storage and other applications requires high reliability power supplies. Thanks to the advanced Lithium Iron Phosphate (LFP) technology and intelligent BMS, GEPT series Lithium-ion Battery provides high energy capacity with compact size, extremely long cycle life with high safety, and it can be used in various environment without compromise of performance.

FEATURES

- **LONG CYCLIC LIFE.** By utlizing proven LFP battery cells, the battery provides super high cycle life at standard and extreme working conditions.
- **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 120Wh/Kg - 130Wh/Kg energy density which is 4X better than traditional lead acid batteries.
- **EXTENDABLE CAPACITY.** Supported by power electronics in BMS, the batteries can be connected in parallel to reach high capacity which is required in many occasions.
- **STRONG UPGRADABILITY.** With abundant communication ports and supporting a variety of communication protocols, the battery can be upgraded for future demands of Internet of Things (IOT).
- **ENVIORNMENT FRIENDLY.** All components are manufactured by environment friendly materials to make the battery has no harm to our environment.

APPLICATIONS

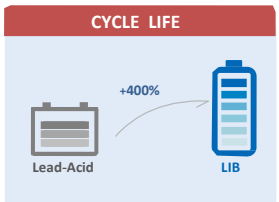
Telecom Backup Power

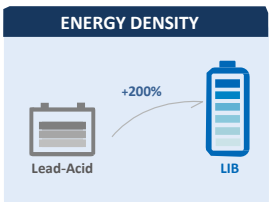
UPS & IDC Datacenter

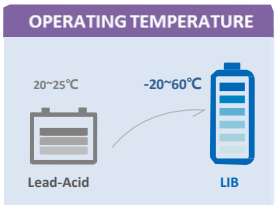
Commericial Renewable Energy

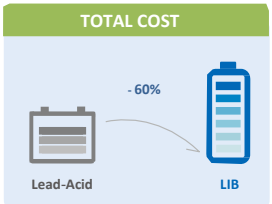
Home Energy Storage

ADVANTAGES









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GENERAL SPECIFICATIONS

Model No.	Nominal Voltage (V)❶	Nominal Capacity (Ah, 0.2C @25℃)	Dimension (mm)				Approx. Weight (Kgs)	Cell Grouping Configuration
			Width	Depth	Height			
25GEPT100	25.6	100	440	300	176	4U❷	29 (±2)	1P8S
25GEPT150	25.6	150	440	320	222	5U	39.4 (±2)	1P8S
36GEPT50	35.2	50	500	250	132	3U	19 (±2)	1P11S
36GEPT100	35.2	100	520	330	222	5U	39.4 (±2)	1P11S
48GEPT30	48	30	440	300	132	3U	16.5 (±2)	1P15S
48GEPT50	48	50	440	390	132	3U	27 (±2)	1P15S
48GEPT50A	48	50	440	380	132	3U	24.5 (±2)	1P15S
48GEPT75A	48	75	440	400	132	3U	35.5 (±2)	1P15S
48GEPT80	48	80	440	440	176	4U	48 (±2)	1P15S
48GEPT100	48	100	440	460	132	3U	47.5 (±2)	1P15S
48GEPT100A	48	100	440	440	133	3U	40.7 (±2)	1P15S
48GEPT100C	48	100	440	440	176	4U	48.0 (±2)	1P15S
48GEPT150	48	150	440	480	222	5U	66 (±2)	1P15S
48GEPT200	48	200	440	550	222	5U	82 (±2)	1P15S

OPERATION PARAMETERS

Model No.	Operation Voltage Range (V)	Charge Voltage (V)	Standard Current (A)		Max. Continuous Current (A)		Operation Temperature (℃)			Operation Humidity	Operation Altitude
			Charge	Discharge	Charge	Discharge	Charge	Discharge	Storage		
25GEPT100	21.6 ~ 29.2	29.2	20	20	100	100	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
25GEPT150	21.6 ~ 29.2	29.2	30	30	150	150	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
36GEPT50	29.7 ~ 40.2	40.2	10	10	50	50	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
36GEPT100	29.7 ~ 40.2	40.2	20	20	100	100	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT30	40.5 ~ 54.5	54	6	6	30	30	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT50	40.5 ~ 54.5	54	10	10	50	50	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT50A	40.5 ~ 54.5	54	10	10	50	50	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT75A	40.5 ~ 54.5	54	15	15	75	75	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT80	40.5 ~ 54.5	54	16	16	80	80	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT100	40.5 ~ 54.5	54	20	20	100	100	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT100A	40.5 ~ 54.5	54	20	20	100	100	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT100C	40.5 ~ 54.5	54	20	20	100	100	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT150	40.5 ~ 54.5	54	30	30	150	150	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m
48GEPT200	40.5 ~ 54.5	54	40	40	150	150	0 ~ 60	-20 ~ 60	0 ~ 45	5% ~ 95%	⩽ 4000m

Notes:
❶ LFP Battery Cell nominal voltage is 3.2V/Cell
❷1U=44mm

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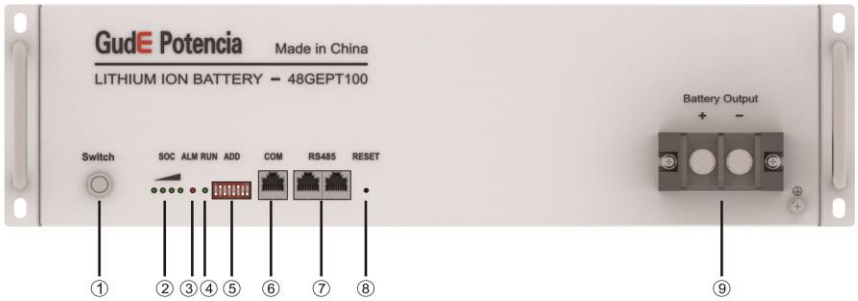
BATTERY FRONT PANEL CONFIGURATION



1 Switch - Battery Switch

2 soc - State of Charge of Battery Capacity

3 ALM - Light of Alarming

4 RUN - Indication of system operation state

5 ADD - Address dial number

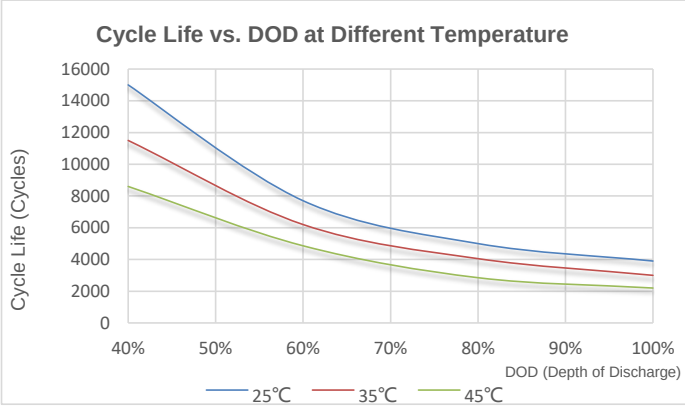
6 COM - external Interface

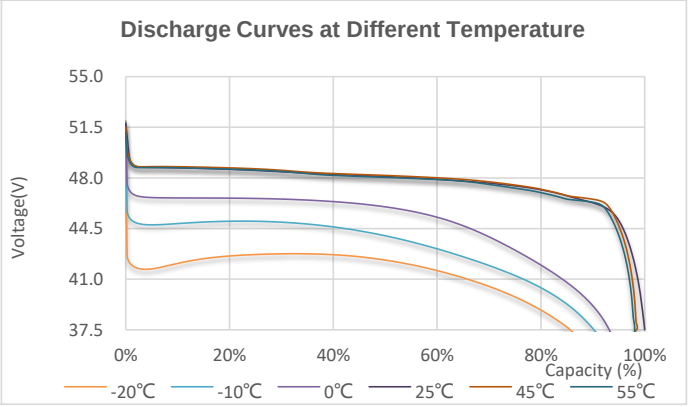
7 RS-485 - RS-485 Interface

8 RESET - Reset Battery System

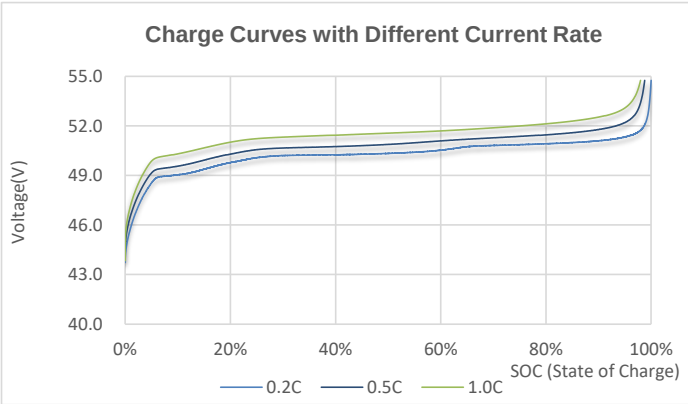
9 Battery Output

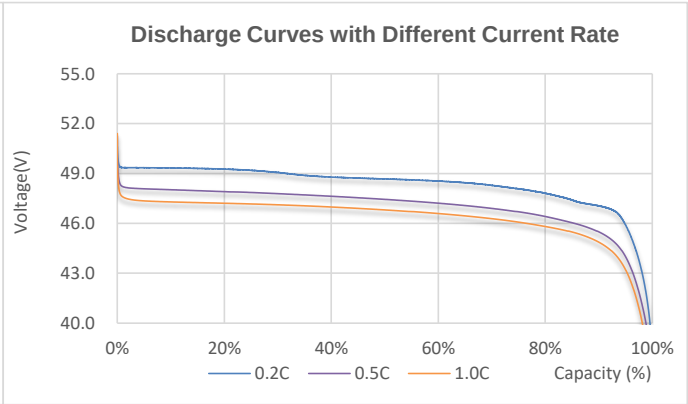
PERFORMANCE CURVES





** Not applicable for 48GEPT100C*





Notes:

❖ Above curves were made based on 48V standard battery modules which are designed with 15S (15 cells in series) cells configuration.
For 25.6V, 35.2V and 51.2V battery modules, customer may calculate the voltage according to 8S, 11S and 16S cells configuration.

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