



**Catalogue**  
**Lithium ion Battery**

## About Us

PGD EcoSolutions' mission is to build a cleaner, quieter, and more renewable future with its energy storage systems to reduce our carbon foot print on the world by providing our clients with custom battery solutions.



## Contact us

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## Energy Storage Battery

**Certification :**  
**IEC62619,**  
**IEC62040,**  
**CE-EMC,**  
**UN38.3,**  
**MSDS**



### BASIC PARAMETERS

Technical parameter	PGD51100 – 16S1P / PGD51200 – 16S1P
Nominal voltage	51.2V
Nominal capacity	100Ah / 200Ah
Battery type	Lithium Ion Phosphate battery
Cycle life (80% DOD)	5000
Charging cutoff voltage	58.4V
Discharge cutoff voltage	43.2V
Charging current	100A
Discharge current	100A
Appearance dimension L *W*H(mm)	640*595*305 (mm) / 740*620*305 (mm)
weight	50 ± 5Kg / 85 ± 5Kg
Charging temperature	0 - 40°C
Discharge temperature	-15 - 55°C
Storage temperature	-10 - 35°C
Communication method	RS485 / RS232 / CAN



# Energy Storage Battery

## 307.2V Stacked Structure Battery for Household Energy Storage



- Safe and stable battery
- Comprehensive safe management of battery
- With CAN, RS485 communication function

### BASIC PARAMETERS

Technical parameter	PGD – 15KWH – DD01
Nominal voltage	307.2V
Nominal capacity	50Ah
Battery type	Lithium Ion Phosphate battery
Cycle life (80% DOD)	5000
Charging cutoff voltage	3504V
Discharge cutoff voltage	259.2V
Charging current	50A
Discharge current	100A
Appearance dimension L*W*H	550 * 450 *1060 (mm)
weight	200Kg
Charging temperature	0 - 55°C
Discharge temperature	-20 - 60°C
Storage temperature	-20 - 60°C
Communication method	CANBUS / RS485



# Off- grid - Energy Storage system



## BASIC PARAMETERS

Type	PGD-5KVA + 5-25KWH-DD
Maximum usable battery capacity	25KWH
Maximum depth of discharge	100%
Nominal voltage	51.2V
Frequency	50Hz / 60 Hz
Rated output power	5KW
Maximum bypass overload current	100A
Battery type	Lithium Iron Phosphate battery
Output voltage waveform	Pure sine wave
Rated Output voltage	230VAC
Appearance dimension L*W*H	400 * 500 * 1828 (mm)
weight	Full load weight 300 ± 5%Kg
Charging temperature	0 - 40°C
Discharge temperature	-15 - 55°C
Storage temperature	-10 - 35°C



## Energy Storage system



### BASIC PARAMETERS

Type	PGD-5KVA + 5-20KWH-JG
Maximum usable battery capacity	20KWH (5KWH – 100KWH available)
Maximum depth of discharge	100%
Nominal voltage	51.2V
Frequency	50Hz / 60 Hz
Rated output power	5KW
Maximum bypass overload current	100A
Battery type	Lithium Iron Phosphate battery
Output voltage waveform	Pure sine wave
Rated Output voltage	230VAC
Appearance dimension L*W*H	600 * 600 * 1500 (mm)
weight	Full load weight 320 ± 5%Kg
Charging temperature	0 - 40°C
Discharge temperature	-15 - 55°C
Storage temperature	-10 - 35°C



# Portable mobile Power Supply



## BASIC PARAMETERS

<b>Model</b>	<b>PGD-600 / PGD-1200</b>
<b>Power</b>	600W / 1200W
<b>Battery</b>	22.2V 43.2Ah / 22.2V 52.8Ah
<b>Energy</b>	959Wh / 1172Wh
<b>Dimension L*W*H</b>	340 * 213 * 208 (mm)
<b>weight</b>	7.9 ± 5%Kg / 8.75 ± 5%Kg
<b>AC Output</b>	220V 50HZ 600W / 1200W
<b>DC Output</b>	PD OUT 45W / 100W, 2*QC3.0, 2*DC, Car charging Output
<b>Input</b>	1*DC, PD IN
<b>Others Features</b>	LED, PV



# Portable mobile Power Supply



## BASIC PARAMETERS

<b>Model</b>	<b>PGD-1000</b>
<b>Power</b>	1000W
<b>Battery</b>	25.6V 45Ah
<b>Energy</b>	1152Wh
<b>Solar charging</b>	36-120V / 240W
<b>Cycle life</b>	2000 times
<b>AC Output</b>	220V 50HZ / 110V 60HZ
<b>DC Output</b>	2*PD60W, 2*QC3.0, 1*12V Cigar lighter, 2*USB
<b>Input</b>	1*DC
<b>Others Features</b>	LED, PV





# Portable mobile Power Supply



## BASIC PARAMETERS

<b>Model</b>	<b>PGD-PP</b>
<b>Power</b>	500W
<b>Battery</b>	11.1V 50Ah
<b>Energy</b>	555Wh
<b>Dimension L*W*H</b>	260 * 150 * 180 (mm)
<b>Weight</b>	6.3 ± 5%Kg
<b>AC Output</b>	110V / 220V 50HZ
<b>DC Output</b>	3*12V Dual USB, 3*12V DC, 1*12V Cigar lighter
<b>Input</b>	1*DC
<b>Others Features</b>	LED, PV



## Portable mobile Power Supply



### BASIC PARAMETERS

<b>Model</b>	<b>PGD-PP3 / PGD-PP4</b>
<b>Power</b>	2000W / 3000W
<b>Battery</b>	25.6V 80Ah / 48V 40.5Ah
<b>Energy</b>	2048Wh / 1944Wh
<b>Dimension L*W*H</b>	592 * 467 * 274 ± 5 (mm) / 320 * 350 * 500 ± 5 (mm)
<b>weight</b>	35 ± 5%Kg
<b>AC Output</b>	110V / 220V 50HZ
<b>DC Output</b>	2*12V DC, 1*24V DC, 3*USB Port, 1''Type C / 2 Type C, 2*USB, 2*12V DC
<b>Input</b>	1*110V / 220V, 1*12V GX20 / 1*110V / 220V, 1*PV, 1Car charger
<b>Others Features</b>	Universal wheel, PV



## Boat / Lead – acid replacement Battery



### BASIC PARAMETERS

### Certification : CE-EMC UN38.3 MSDS

Model	Nominal voltage	Rated capacity	Max discharge current	Dimension L*W*H (mm)
PGDLF1206	12.8V	6Ah	6A	151*65*95
PGDLF1210	12.8V	10Ah	10A	150*95*95
PGDLF1220	12.8V	20Ah	20A	181*76*165
PGDLF1230	12.8V	30Ah	30A	194*132*170
PGDLF1240	12.8V	40Ah	40A	198*166*170
PGDLF1250	12.8V	50Ah	50A	198*166*170
PGDLF1260	12.8V	60Ah	60A	229*138*208
PGDLF1280	12.8V	80Ah	80A	260*168*209
PGDLF12100	12.8V	100Ah	100A	329*172*214
PGDLF12150	12.8V	150Ah	150A	483*170*240
PGDLF12200	12.8V	200Ah	200A	522*240*218
PGDLF12300	12.8V	300Ah	200A	520*269*220
PGDLF12400	12.8V	400Ah	250A	520*269*220
PGDLF2420	25.6V	20Ah	20A	198*166*170
PGDLF2440	25.6V	40Ah	40A	260*168*209
PGDLF2460	25.6V	60Ah	60A	329*172*214
PGDLF24100	25.6V	100Ah	100A	522*240*218
PGDLF24200	25.6V	200Ah	200A	520*269*220



# Electric Vehicle Battery



## BASIC PARAMETERS

Model	capacity	voltage	Continuous current	Max current	Weight kgrs	Dimension L*W*H mm
PGD-M3610	10Ah	36V	20-35A	35A	≤5	200*150*75
PGD-M3620	20Ah	36V	20-35A	35A	≤7.5	200*180*100
PGD-M4824	24Ah	48V	30-50A	50A	≤15	180*210*170
PGD-M4830	30Ah	48V	30-50A	50A	≤18	182*130*263
PGD-M6024	24Ah	60V	50-80A	80A	≤18.7	230*210*170
PGD-M6030	30Ah	60V	50-80A	80A	≤20	190*160*284
PGD-M6040	40Ah	60V	50-80A	80A	≤26	340*210*145
PGD-M7220	20Ah	72V	50-100A	100A	≤16.5	260*210*170
PGD-M7230	30Ah	72V	50-100A	100A	≤17.6	233*173*284
PGD-M7240	40Ah	72V	50-100A	100A	≤20	295*220*180



# RV Battery



## BASIC PARAMETERS

Cell mode	PGD-LF4S 100	PGD-LF4S 200	PGD-LF4S 300
Nominal capacity	100Ah	200Ah	300Ah
Nominal voltage	12.8V	12.8V	12.8V
Energy	1280Wh	2560Wh	3840Wh
Charge voltage	14.6V	14.6V	14.6V
Discharge cut- off voltage	10V	10V	10V
Standard charge current	20A	40A	60A
Max charge current	100Ah	100Ah	200Ah
Standard Discharge current	20A	40A	60A
Max continuous Discharge current	100A	200A	200A
Cycle life	2000 times	2000 times	2000 times
Internal impedance	≤ 10mΩ	≤ 8mΩ	≤ 6mΩ
Dimension L*W*H	329*172*217 (mm)	522*240*218 (mm)	520*269*220 (mm)
weight	Approx 11.5Kg	Approx.22Kg	Approx.30Kg
Working temperature range	Discharge: -20-60°C	Discharge: -20-60°C	Discharge: -20-60°C
Storage temperature	-10 - 50°C	-10 - 50°C	-10 - 50°C
Communication port and protocols	CAN <a href="#">bus2.0A@500</a> KBPS / lin BUS <a href="#">2.2a@19200</a> bps / Bluetooth		



# Robot Battery



## BASIC PARAMETERS

<b>Rated capacity</b>	<b>45Ah (10Ah – 200Ah available)</b>
<b>Nominal Voltage</b>	<b>14.8Ah (14.8V – 60V available)</b>
<b>Discharge Cut – off Voltage</b>	<b>11.0V</b>
<b>Charge Cut – off Voltage</b>	<b>16.8V</b>
<b>Internal impedance</b>	<b>≤120mΩ</b>
<b>Standard charge</b>	<b>8.64A</b>
<b>Standard discharge</b>	<b>8.64A</b>
<b>Fast charge</b>	<b>20A</b>
<b>Fast discharge</b>	<b>30A</b>
<b>Maximum charge current</b>	<b>25A</b>
<b>Maximum discharge current</b>	<b>30A</b>
<b>Operation temperature range</b>	<b>Charge 0- 45 °C - discharge 10 – 60 °C</b>
<b>Storage temperature range</b>	<b>-10 - 60°C</b>
<b>weight</b>	<b>Approx. 2700g</b>
<b>Open voltage</b>	<b>14.4V – 15.6V</b>



# Underwater Robot Battery



## BASIC PARAMETERS

<b>Model</b>	<b>PGD4816</b>
<b>Voltage</b>	48V
<b>capacity</b>	16Ah
<b>Cycle Life</b>	2000
<b>Charging Cutoff Voltage</b>	54.75V
<b>Discharge Cutoff Voltage</b>	37.5V
<b>Charging Current</b>	5A
<b>Discharge Current</b>	3.2A
<b>weight</b>	9.2Kg
<b>Charging temperature</b>	0 - 40°C
<b>Discharge temperature</b>	-15 - 55°C
<b>Storage temperature</b>	-10 - 35°C
<b>Communication mode</b>	RS485 / RS232 / CAN



## Small Battery Pack



### BASIC PARAMETERS

Model	Voltage V	capacity	Dimension (+/- 1 mm)		
			Length	Width	Height
PGD-Li1S1P	3.7	2600	18.5±1	18.5±1	66±1
PGD-Li2S1P	7.4	2200	37±1	18.5±1	66±1
PGD-Li2S1P	7.4	2200	18.5±1	18.5±1	130±1
PGD-Li2S1P	7.4	3200	26.5±1	26.5±1	100±1
PGD-Li2S1P	7.4	2500	18.5±1	18.5±1	130±1
PGD-Li3S1P	10.8	2200	55.5±1	18.5±1	66±1
PGD-Li3S1P (Triangle)	11.1	2000	37±1	37±1	66±1
PGD-Li3S1P	10.8	2250	55.5±1	18.5±1	66±1
PGD-Li4S1P	14.4	2200	37±1	18.5±1	66±1
PGD-Li4S1P	14.4	2200	37±1	37±1	66±1
PGD-Li4S1P (Triangle)	22.2	2000	37±1	37±1	130±1





## Prismatic LFP Battery Cell



### BASIC PARAMETERS

Model	capacity	voltage	weight	Discharge rate
32140	15Ah	3.2V	295±10g	2C, 6C (10S)
40135	20Ah	3.2V	370±10g	3C
2265142	23Ah	3.2V	435±10g	1.5C, 5C (10S)
20100140	27Ah	3.2V	640±10g	1.5C, 5C (10S)
26148134	50Ah	3.2V	1150±50g	1C, 3C (10S)
36115200	50Ah	3.2V	1500±50g	3C
3914895	50Ah	3.2V	1100±50g	2C
28148115	50Ah	3.2V	950±50g	1C
27135206	80Ah	3.2V	1640±100g	1C
50160119	100Ah	3.2V	1920±50g	2C (30S)
34135192	100Ah	3.2V	1940±100g	1C
40130220	100Ah	3.2V	2250±50g	1C, 2C (30S)
40130205	100Ah	3.2V	2300±100g	3C (30S)
52148119	100Ah	3.2V	1915±50g	2C
42173166	135Ah	3.2V	2700±100g	2C
54174145	150Ah	3.2V	3000±100g	2C, 5C (10S)
48173166	150Ah	3.2V	2900±100g	1C
54173207	200 / 230 Ah	3.2V	4000±300g	1C
72173207	280 / 300 Ah	3.2V	5420±300g	1C



## Cylindrical Lithium ion Battery



### BASIC PARAMETERS

Model	capacity	voltage	weight	Charge Discharge
14500	500	3.2	37	3.65 – 2.25
14500	600	3.2	38	3.65 – 2.25
14650	800	3.2	39	3.65 – 2.25
16340	550	3.2	40	3.65 – 2.25
16500	1050	3.2	41	3.65 – 2.25
18350	700	3.2	43	3.65 – 2.25
18500	1200	3.2	45	3.65 – 2.25
18650	1500	3.2	50	3.65 – 2.25
18730	2000	3.2	51	3.65 – 2.25
22650	2100	3.2	80	3.65 – 2.25
26650	3000	3.2	90	3.65 – 2.25
26650	3300	3.2	91	3.65 – 2.25
26650	3600	3.2	93	3.65 – 2.25
26650	4000	3.2	95	3.65 – 2.25
26800	4000	3.2	85	3.65 – 2.25
32650	5000	3.2	140	3.65 – 2.25
32650	5500	3.2	145	3.65 – 2.25
32650	6000	3.2	150	3.65 – 2.25
32C5	6000	3.2	150	3.65 – 2.25



# Cylindrical Lithium ion Battery



## BASIC PARAMETERS

Model	capacity	voltage	weight	Charge Discharge	Max discharge current
18650	1200	3.7	50	4.2 – 3.0	1C
18650	1500	3.7	50	4.2 – 3.0	1C, 3C, 5C, 10C
18650	1800	3.7	50	4.2 – 3.0	1C, 3C, 5C
18650	2000	3.7	50	4.2 – 3.0	1C, 3C, 5C, 10V
18650	2200	3.7	50	4.2 – 3.0	1C, 3C, 5C
18650	2400	3.7	50	4.2 – 3.0	1C, 3C
18650	2500	3.7	50	4.2 – 3.0	1C, 3C, 10C
18650	2600	3.7	50	4.2 – 3.0	1C, 3C
18650	3000	3.7	50	4.2 – 3.0	1C
18650	3200	3.7	50	4.2 – 3.0	1C
21700	4000	3.7	60	4.2 – 3.0	5C
21700	4500	3.7	60	4.2 – 3.0	5C
21700	4800	3.7	60	4.2 – 3.0	3C
14500	400	3.7	35	4.2 – 3.0	1C
14500	500	3.7	35	4.2 – 3.0	1C
14500	600	3.7	35	4.2 – 3.0	1C
14500	700	3.7	35	4.2 – 3.0	1C
14500	800	3.7	35	4.2 – 3.0	1C
26650	4800	3.7	90	4.2 – 3.0	3C
26650	5000	3.7	90	4.2 – 3.0	3C