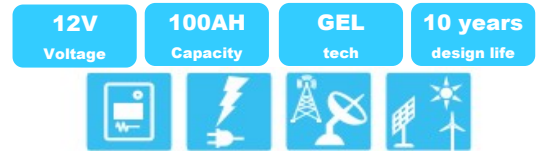


SOLRA SERIES VRLA BATTERY

The Solar series is designed for frequent cyclic charge and discharge applications under extreme environments. By combining the newly developed Nano Gel electrolyte with high density paste, the Solar series offers high recharge efficiency at very low charge current. The acid stratification is highly reduced by adding Nano Gel. This series is suit for energy storage for renewable energies such as PV, wind turbine power systems and CATV.



TECHNICAL SPECIFICATIONS

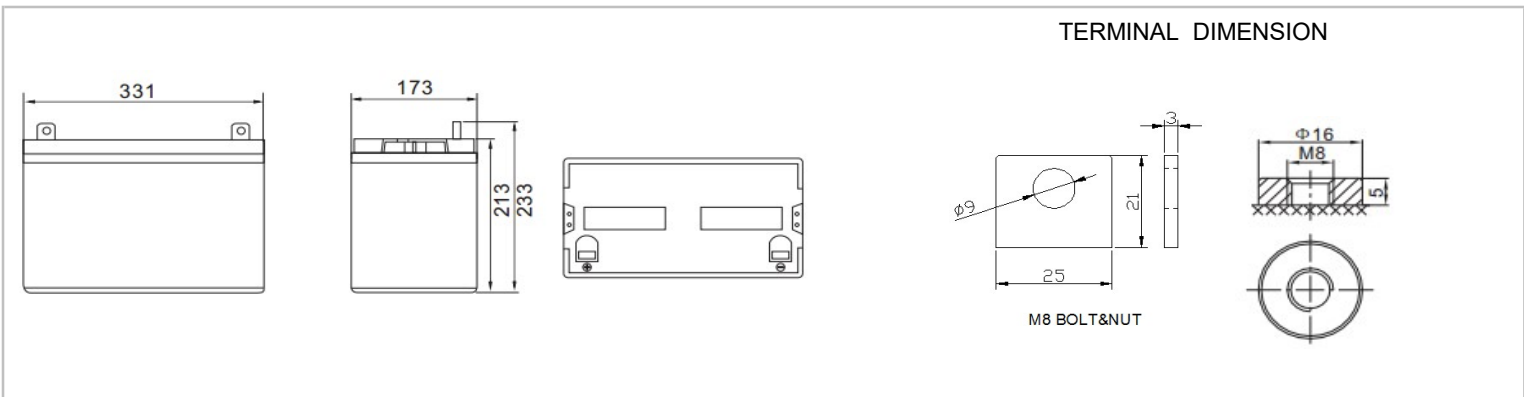
Nominal Voltage (V)	12
Nominal Capacity(25°C)	100Ah @ 10HR-rate (to 1.80Vpc)
Dimension(mm)	L331×W173×H213×TH233
Approx.Weight	30.5kg
Internal Resistance	Approx.4.5mΩ
Max.Charge Current	25A
Max.Discharge Current (5S)	1000A
Short Circuit Current	2100A
Self Discharge	Approx. 2.5% per month @ 20°C
Ambient Temperature	Discharge:-25~60°C Charge: -25~50°C Storage: -25~45°C
Float Charge Voltage	13.50~13.80V@25°C(-3mv/Cell/°C)
Equalize and cycle Use Charge Voltage	14.10~14.40V @25 C
Designed Floating Life (25 C)	10Years
Container Material	ABS(UL94-V0 Optional)



Complied standards

- IEC 60896-21/22
- GB/T19638
- IEC61427
- JIS C8704
- BS6290 part 4

BATTERY DIMENSIONS



BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)								
F.V/Time	30min	1h	3h	4h	5h	8h	10h	20h
9.60V	110.9	64.0	27.4	21.5	18.3	12.9	10.5	5.6
10.20V	107.4	61.6	26.6	20.9	17.9	12.6	10.4	5.5
10.50V	103.0	59.7	26.0	20.5	17.5	12.4	10.2	5.4
10.80V	95.4	56.3	25.2	19.9	17.1	12.0	10.0	5.3
11.10V	84.0	49.8	23.5	18.9	16.5	11.5	9.7	5.1

Constant Power Discharge Characteristics: Watts (25°C)								
F.V/Time	30min	1h	3h	4h	5h	8h	10h	20h
9.60V	1210.4	723.7	312.8	246.4	210.5	148.3	121.5	64.9
10.20V	1187.4	699.8	305.4	241.1	207.1	145.9	120.8	64.5
10.50V	1147.5	681.1	300.5	237.0	203.7	144.1	119.5	63.8
10.80V	1074.2	645.0	292.0	231.2	199.4	140.8	117.3	62.6
11.10V	956.6	573.5	273.6	221.2	193.0	135.8	114.5	60.7

PARAMETERS FOR SOLAR & WIND APPLICATIONS

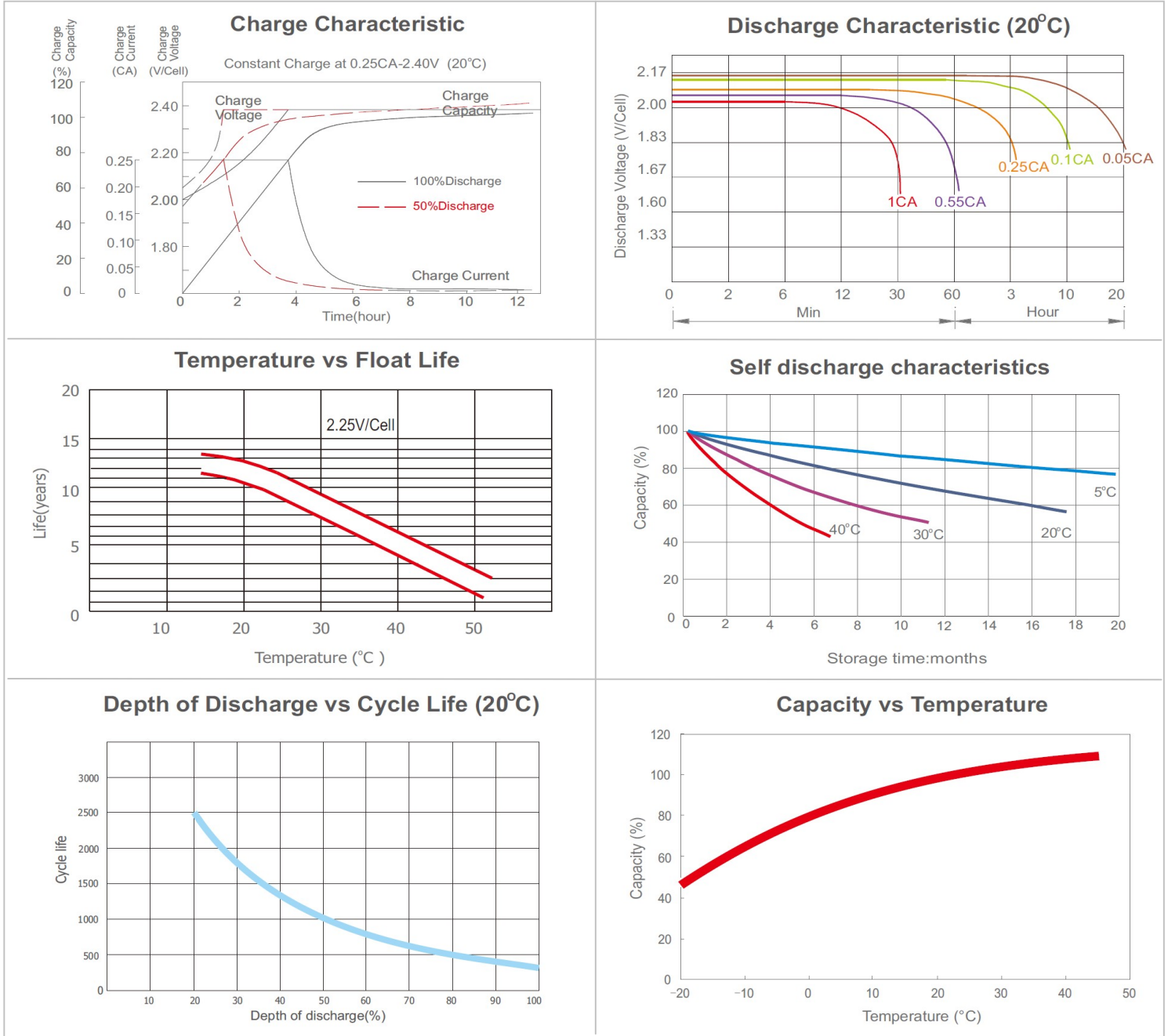
Long time discharge capacity for Solar & Wind applications

Capacity(Ah)	C ₂₄	C ₄₈	C ₇₂	C ₁₀₀	C ₁₂₀
Solar12-100	103.3	110.0	115.0	116.0	118.0
Final Voltage	1.85V				

Solar & Wind applications parameters settings

Over voltage disconnect:	2.45±0.01V/cell @ 25°C
Regulation/equalize voltage:	2.40±0.01V/cell @ 25°C
Array reconnection voltage:	2.25±0.005V/cell @ 25°C
Float voltage setting:	2.27±0.005V/cell @ 25°C
Low voltage alarm voltage:	1.95±0.005V/cell @ 25°C
Low voltage disconnect:	1.90±0.005V/cell @ 25°C
Load reconnect voltage:	2.09±0.01V/cell @ 25°C
Temp. compensate coefficient:	-5mV/cell/°C

CHARACTERISTICS



FINAL VOLTAGE SETTINGS RECOMMENDED ACCORDING TO THE DISCHARGE CURRENT

Discharge Current I (A)	$I \leq 0.08C$	$0.08C \leq I < 0.2C$	$0.2C \leq I < 0.6C$	$0.6C \leq I < 1.0C$	$I \geq 1.0C$
Final of Voltage	$\geq 1.85V_{pc}$	$\geq 1.80V_{pc}$	$\geq 1.75V_{pc}$	$\geq 1.70V_{pc}$	$\geq 1.60V_{pc}$

SHENZHEN CHAOWEI RENEWABLE ENERGY CO., LTD.

Unit 1815, 18th Floor, Xusheng Building, No. 4004 Baoan Street, Baoan District, Shenzhen, China.

www.chaoweipower.com