



12V
voltage

200Ah
capacity

AGM-Gel
Deep cycle
Tech.

VRLA

4 Years
warranty

8 Years
cycle

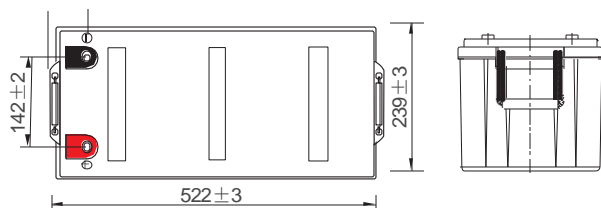
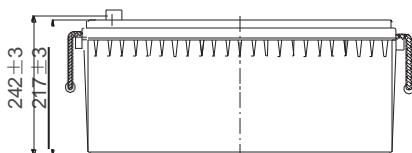


Solar Hybrid Gel-AGM Battery

The Solar Hybrid Gel-AGM Battery has gel electrolytes which offer a special fiber separator between the plates.

This innovative combination prevents acid stratification, improving the life cycle of the battery.

■ T975 Terminal



THE PACKAGE CONTENT

1 x Gel AGM Battery

PACKAGE DIMENSIONS

Height (mm)	Length (mm)	Width (mm)	Weight (kg)
282	530	245	59

APPLICATIONS

Ideal for use with solar power systems.(Household systems, solar traffic lights, emergency lighting system, inverter, moveable energy storage system, UPS for high frequency use).

TECHNICAL INFORMATION

Specifications

Nominal Voltage	12V
Nominal Capacity(10HR)	200Ah
Terminal	"L" Type heavy duty terminal (T975)
Container Material	ABS
Rated Capacity	210.0 AH/ 10.5A (20hr, 1.80V/Cell,25 °C) 200.0 AH/ 20.0A (10hr, 1.80V/Cell,25 °C) 178.0 AH/ 35.6A (5hr, 1.75V/ Cell,25° C) 159 AH/53.0A (3hr, 1.75V/ Cell,25° C) 129.3AH/129.3A (1hr, 1.60V/ Cell,25° C)
Max. Discharge Current	2000A (5s)
Internal Resistance	Approx 2.8mΩ
Operating Temp.Range	Discharge : -15~50 °C Charge : 0~40 °C Storage : -15~ 40 °C
Nominal Operating Temp. Range	25±3 °C
Cycle Use	Initial charging current less than 40A voltage 14.4V-15.0V at 25 °C temp. coefficient -30mV/ °C
Standby Use	No limit on initial charging current voltage 13.6V-13.8V at 25 °C temp. coefficient -20mV/ °C
Capacity affected by Temperature	40 °C 103% 25 °C 100% 0 °C 86%
Self Discharge	Riyada batteries may be stored for up to 6 months at 25 °C and then a freshening charge is required. For higher temperatures the time interval will be shorter.

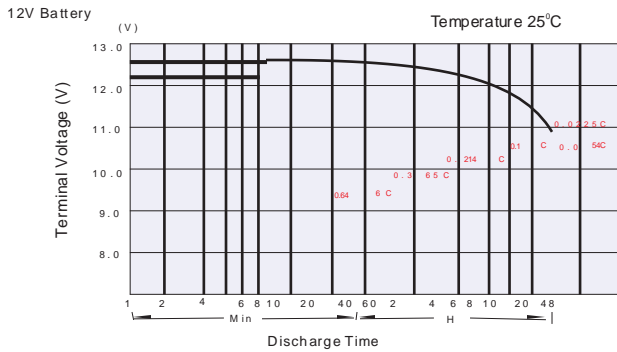
Constant Current Discharge (Amperes) at 25 °C

F.V/Time	1H	2H	3H	4H	5H	6H	8H	10H	20H
1.85V/Cell	105.1	59.9	47.6	38.8	33.2	29.9	23.4	18.8	9.86
1.80V/Cell	111.3	63.1	50.0	40.6	34.4	30.9	24.0	20.0	10.5
1.75V/Cell	118.0	65.9	51.4	42.2	35.6	31.9	24.4	20.4	10.7
1.70V/Cell	123.4	68.4	53.0	43.2	36.2	32.4	24.8	20.6	10.8
1.67V/Cell	127.8	70.5	54.6	44.2	36.8	32.9	25.2	20.8	10.9
1.60V/Cell	129.3	71.6	55.6	44.8	37.4	33.4	25.4	21.0	11.0

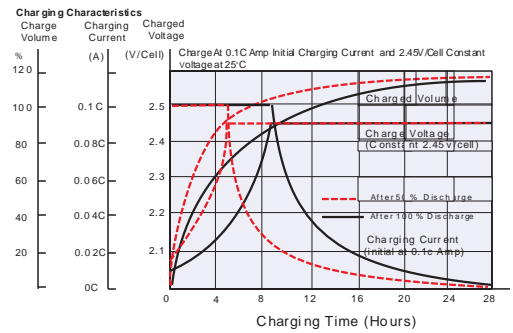
Constant Power Discharge (Watts/cell) at 25 °C

F.V/Time	1H	2H	3H	4H	5H	6H	8H	10H	20H
1.85V/Cell	204.3	117.0	93.3	76.3	65.4	59.0	46.2	37.2	19.6
1.80V/Cell	214.8	122.7	97.6	79.5	67.5	60.8	47.3	39.5	20.9
1.75V/Cell	226.3	127.5	99.9	82.3	69.7	62.5	48.0	40.2	21.3
1.70V/Cell	234.9	131.6	102.6	84.0	70.6	63.4	48.7	40.6	21.5
1.67V/Cell	242.1	135.1	105.4	85.7	71.6	64.3	49.4	40.9	21.6
1.60V/Cell	242.6	136.3	106.7	86.4	72.5	65.0	49.7	41.2	21.8

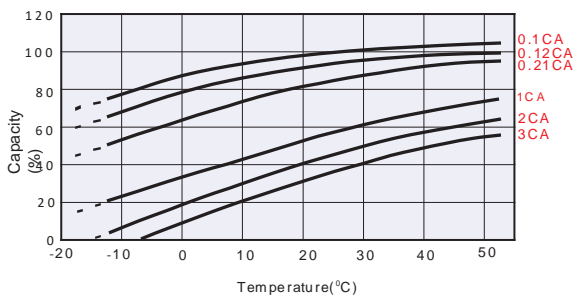
Discharge Characteristics



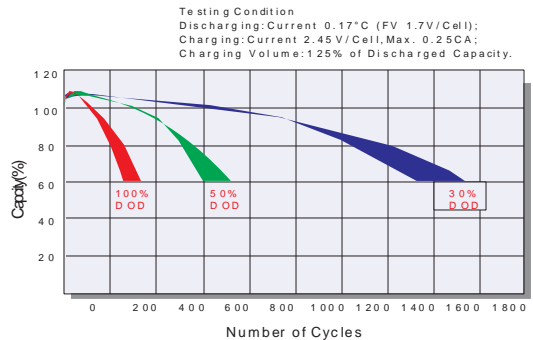
Charging Characteristics (Cycle Use)



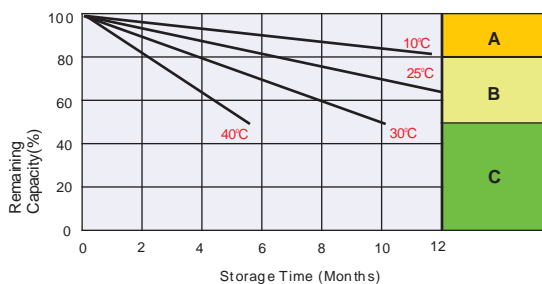
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.