

General Series Battery

ReFortis General (GP) Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. GP Series Batteries are the general purpose batteries with 5 years floating design life at 25 °C Meet with IEC, BS, JIS and Eurobat standard. UL (MH62092), CE approved.

Application

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Electric toy car and wheelchairs, etc.
- * Power tools
- * Alarm system
- * Marine equipment
- * Medical equipment
- * Fire and Security System

General Features

- * Heavy Duty Grid
- * Mechanized assembly
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Long Life and low self-discharge design

Construction

- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

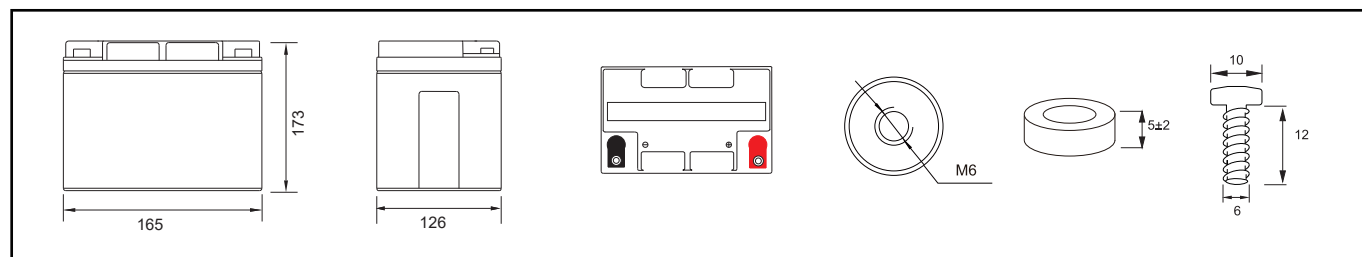


Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		28Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	165mm (6.49 inches)	126mm (4.96 inches)	173mm (6.81 inches)	173mm (6.81 inches)
Approx Weight	8kg (17.63lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(1.4A,10.5V)	10 hour rate(2.51A,10.8V)	5 hour rate(4.8A,10.5V)	1 hour rate(16.8A,9.6V)
	28.0Ah	25.1Ah	24.0Ah	16.8Ah
Max.discharge current	420A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 9mΩ			
Capacity affected by Temp.(20 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge @25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25°C (77°F)	Cycle Use		Float Use	
	14.4-15.0V (Initial charging current less than 8.4A)		13.50-13.80V	

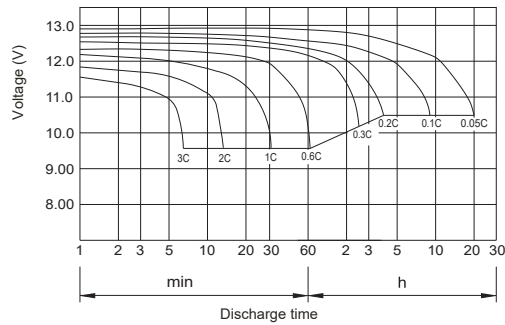
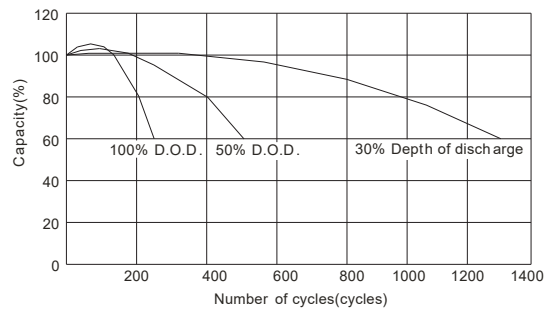
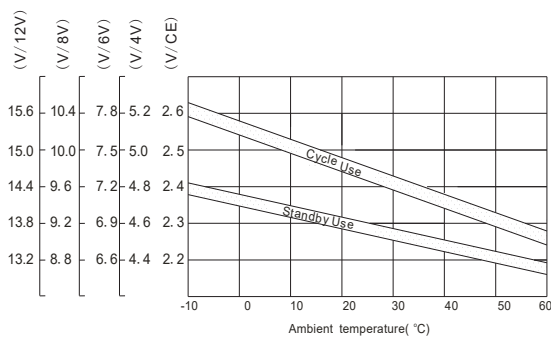
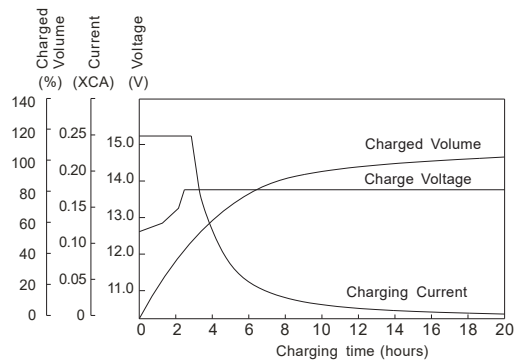
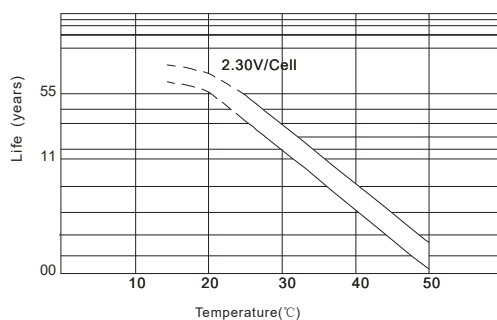
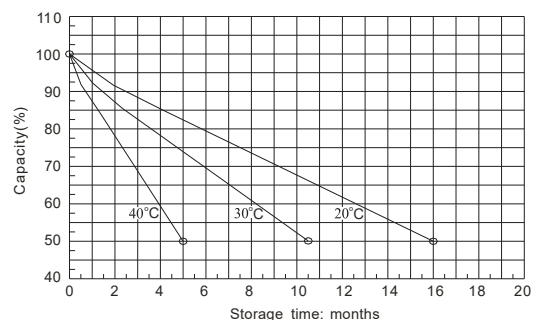
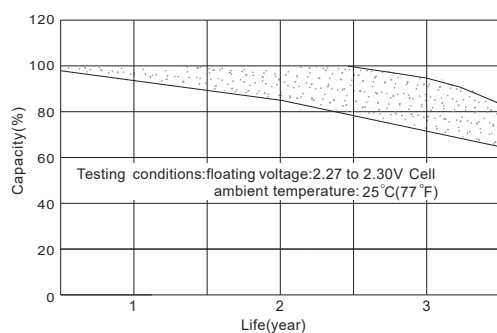
Outer dimension (mm)

Terminal Type (mm)



Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V\TIME		5min	10min	15min	30min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	100.80	66.08	49.00	32.20	16.80	9.80	7.21	5.79	4.91	3.24	2.65	1.45
	W	1188.80	746.70	564.70	341.18	193.70	113.40	83.40	67.00	56.80	37.50	30.70	16.80
10.20V	A	92.40	63.23	45.03	30.57	15.77	9.40	7.00	5.60	4.82	3.19	2.60	1.41
	W	1118.80	707.00	530.80	339.50	182.00	108.90	81.10	64.90	55.80	36.90	30.10	16.30
10.50V	A	84.12	59.08	42.00	29.63	15.26	9.22	6.88	5.32	4.80	3.15	2.58	1.40
	W	1080.30	686.00	507.50	336.00	176.60	106.80	79.70	61.60	55.40	36.50	29.90	16.20
10.80V	A	80.84	56.47	39.20	28.82	14.75	8.98	6.77	5.23	4.55	3.07	2.51	1.37
	W	947.30	665.00	488.80	334.80	171.50	104.50	78.80	60.80	53.00	35.00	29.20	15.90
11.10V	A	74.76	53.20	36.04	28.00	14.23	8.75	6.42	5.13	4.35	2.99	2.45	1.33
	W	915.80	642.80	465.50	332.50	169.20	103.80	76.40	60.70	51.80	33.80	28.60	15.80

Discharge characteristic Curve

Cycle service life in relation to depth of discharge

Relationship between charging voltage and temperature

Constant voltage charging characteristic (0.25CA, at 25°C)

Temperature effects on float life

Self-discharge characteristic

Life characteristics of standby use

Charge characteristic Curve for standby use
