

GEL Series Battery

Range Summary

By combining the newly developed nano gel electrolyte with high density paste, Vvution created an innovative range of VTG batteries. The range offers high recharge efficiency at the very low charge current. The acid stratification is highly depressed by adding of gel. This range battery is highly suited to energy storage for renewable energy such as PV and wind turbine power systems applications.

General Features

- 12 years float life at 25°C
- Up to 5 years design life at renewable energy applications
- Wide operating temperature range of -15 to 60°C
- Nano gel electrolyte eliminate the acid stratification and prolong cycle life
- Round trip efficiency as high as 85%
- Thick positive flat plate with high density paste
- Low self-discharge rate and long shelf life(1 year at 25°C)
- Excellent deep discharge recovery capability



Construction

- PositiveLead dioxide
- NegativeLead
- Container.....ABS
- CoverABS
- SealantEpoxy Resin
- Safety valveEPDR
- TerminalCopper
- SeparatorAGM
- ElectrolyteH2SO4+SiO₂



ISO 9001



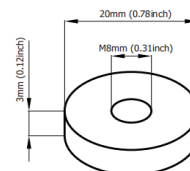
ISO14001



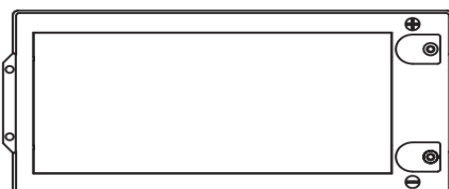
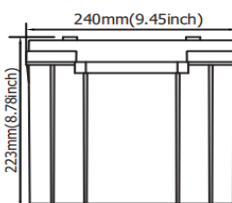
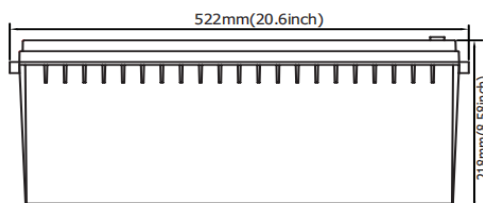
CE

Application

- Photovoltaic system
- Renewable Energy System
- Electric Utility
- Outdoor control Equipment
- Railroad Utility



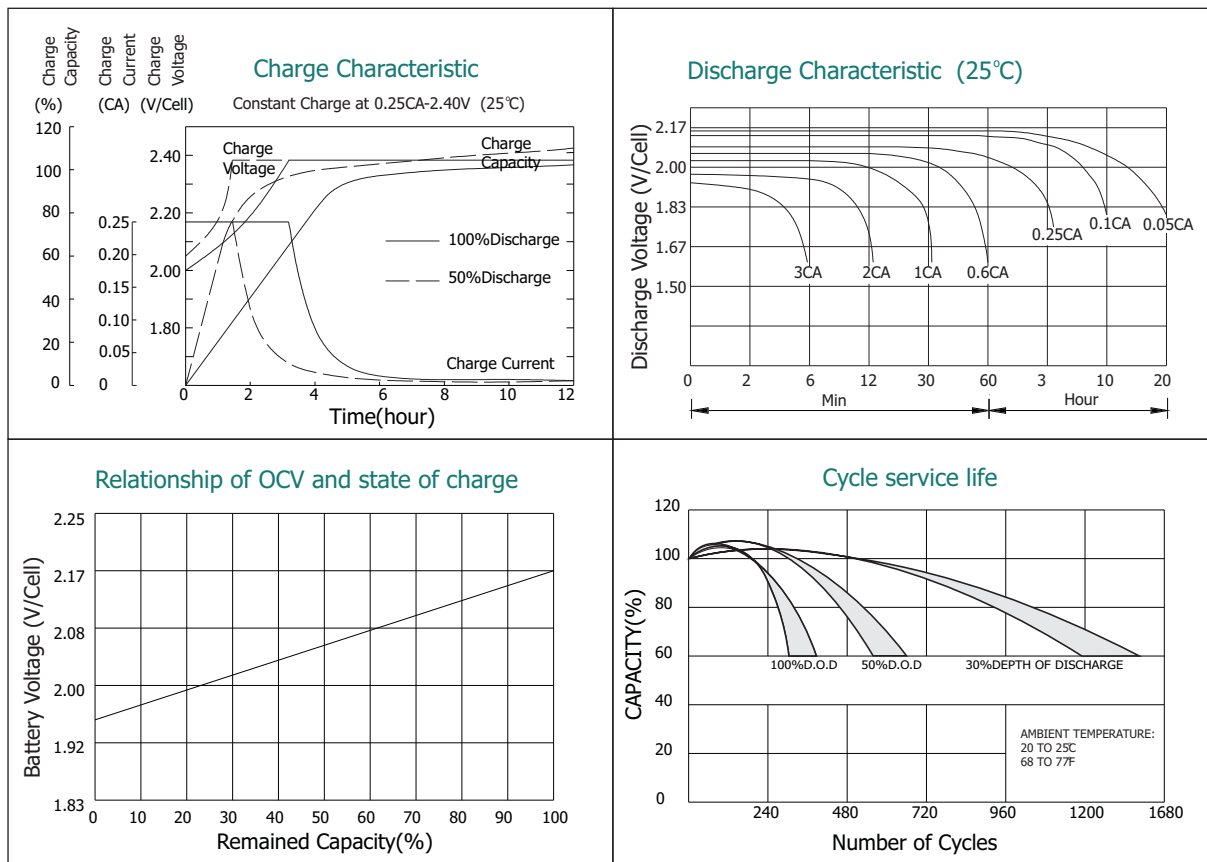
Battery Dimensions



Terminal Dimensions

Technical Specifications

Battery Model	VTG12-180			
Designed Floating Life	12 Years			
Capacity(25°C)	100HR(2.21A,1.80V)	20HR(10.0A,1.75V)	10HR(18.0A,1.75V)	1HR(107.5A,1.60V)
	221.0Ah	200.0Ah	180.0Ah	107.5Ah
Dimensions	Length	Width	Height	Total Height
	522mm(20.6inch)	240mm(9.45inch)	218mm(8.58inch)	223mm(8.78inch)
Approx. Weight	56.0Kg (123.2lbs)			
Internal Resistance	Full charged at 25°C: 0.003 Ohm			
Self Discharge	< 3% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(10HR)	40°C	25°C	0°C	-15°C
	109%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.4-14.8V(-30mV/°C), max. Current: 50A		13.6-13.8V(-18mV/°C)	



Constant current discharge ratings-amperes at 25°C

F.V/Time	5min	10min	15min	30min	1h	5h	10h	20h	100h
1.60V	700	480	315.8	184.7	107.5	32.8	19.8	10.4	-----
1.67V	630	438	292.9	173.8	102.5	32.1	18.7	10.3	-----
1.70V	598	422	278.2	166.0	99.0	31.4	18.5	10.2	-----
1.75V	532	390	257.5	157.3	94.8	30.6	18.0	10.0	2.25
1.80V	480	362	231.0	147.6	89.6	29.9	17.8	9.91	2.21
1.85V	364	298	194.0	128.2	80.6	27.8	16.5	9.63	2.08

Constant power discharge ratings-watts at 25°C

F.V/Time	5min	10min	15min	30min	1h	5h	10h	20h	100h
1.60V	1154	796	554.9	338.1	202.8	63.4	37.8	20.5	-----
1.67V	1094	786	523.3	320.8	194.5	62.4	37.3	20.4	-----
1.70V	1022	766	501.8	309.2	189.1	61.2	37.0	20.2	-----
1.75V	952	716	471.9	295.2	181.9	59.8	36.8	19.9	4.38
1.80V	854	666	428.9	279.3	172.8	58.5	36.5	19.7	4.30
1.85V	684	552	364.8	245.7	156.2	54.7	34.0	19.2	4.18

Quality Management System Authentication	CE authentication	CE	UL	Pb	Pb	Recycling	Fire	Explosion	Shock	Corrosion	Leakage
GB/T19001-2008 NO.00113Q29865ROM/4200	CE12-GPE 120171										

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