

Deep Cycle VRLA AGM Battery

VTD6-210

The Valiant VTD series deep cycle AGM battery features special additives to the positive plate and advanced AGM separators which increase cycle life up to 70% higher compared with standard AGM batteries. This technology also provides up to 15 years of float life. The VTD series is highly suited for systems that rely heavily on battery storage power such as off-grid solar systems, RV and marine and electric vehicles.

6V Voltage	210Ah Capacity	AGM Technology	Deep Cycle
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GENERAL FEATURES

- Thicker plate with high Tin low Calcium alloy
- Deep discharge recovery, 1200cycle @ 50% DOD
- 2years full warranty in most applications
- Longer Service Life, in both Float or Cycling applications
- High Power Density

APPLICATIONS

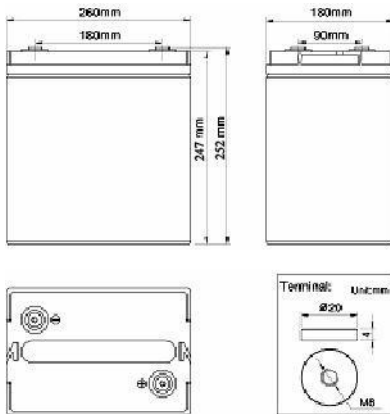
- Off-grid solar systems
- RV and marine
- UPS/Telecom
- Electric vehicle
- Golf cart

COMPLIED STANDARDS

IEC 60896-21/22	JIS C8704
YD/T799	ISO9001
GB/T 19638	CE

DIMENSIONS & WEIGHT

Length(mm)/inches	260 ± 1/10.24
Width(mm)/inches	180 ± 1/7.09
Height(mm)/inches	247 ± 1/9.72
Total Height(mm)/inches	252 ± 1/9.92
Weight(kg)/Pounds	29.5 ± 3%/65.04



TECHNICAL SPECIFICATIONS

Nominal Voltage		6V(3 cells per unit)
Design Floating Life @25°C		15 Years
Nominal Capacity @25°C (20 hour rate@10.5A,5.4V)		210Ah
Capacity @25°C	10hour rate (18.9A,5.4V)	189Ah
	5 hour rate (33.4A,5.25V)	167Ah
	1 hour rate (116.7A,4.8V)	116.7Ah
Internal Resistance	Full Charged Battery@25°C	≤2.8 mΩ
Ambient Temperature	Discharge	-15°C~45°C
	Charge	-15°C~45°C
	Storage	-15°C~45°C
Max.Discharge Current@25°C		1050A(5s)
Capacity affected by Temperature (10 hour)	40°C	105%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge@25°C per Month		3%
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than 42A Voltage 6.8-6.9V
	Cycle Use	Initial Charging Current Less than 42A Voltage 7.2-7.45V

BATTERY DISCHARGE LABEL

Discharge Constant Current per Cell (Amperes at 25°C)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	270.3	172.1	127.1	116.7	74.0	52.0	35.3	23.3	20.8	11.34	2.52
1.65V	265.4	169.0	124.7	114.5	72.7	51.0	34.7	22.9	20.4	11.13	2.47
1.70V	260.4	165.8	122.4	112.4	71.3	50.1	34.1	22.5	20.0	10.92	2.42
1.75V	255.5	162.7	120.1	110.3	70.0	49.1	33.4	22.1	19.7	10.71	2.38
1.80V	245.7	156.5	115.5	106.1	67.3	47.3	32.1	21.2	18.9	10.5	2.33

Discharge Constant Power per Cell (Watts at 25°C)

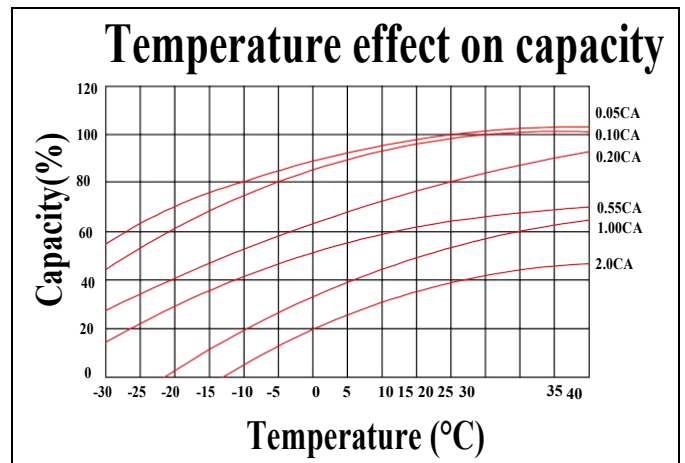
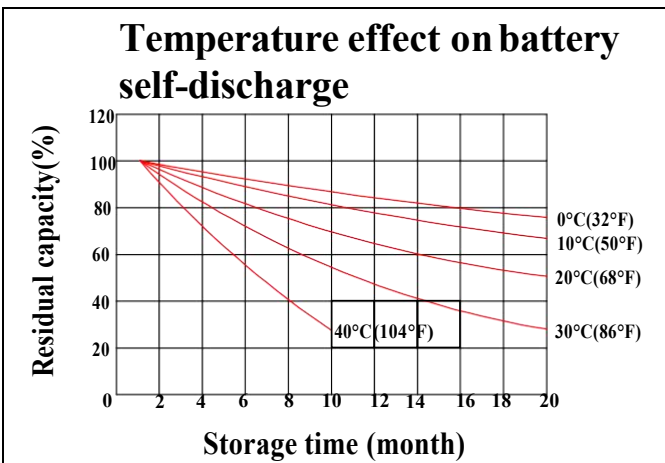
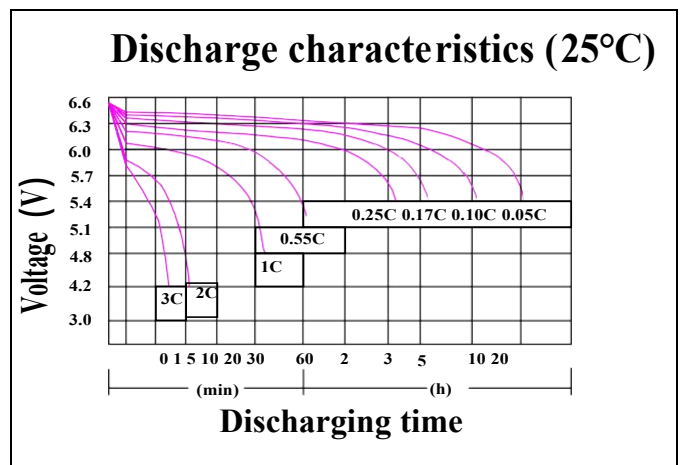
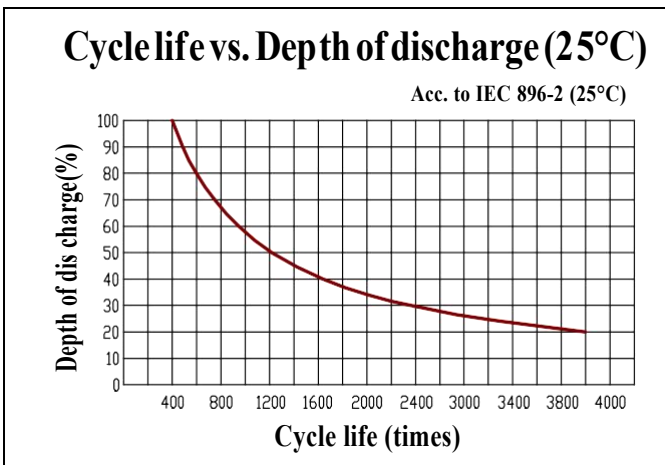
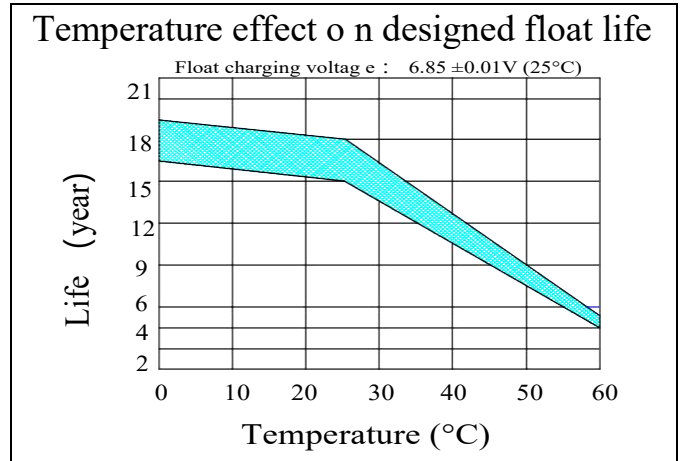
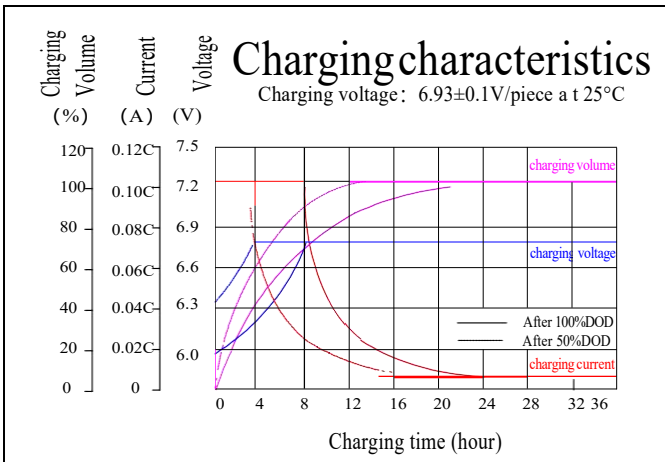
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	520.3	331.3	244.6	224.6	142.5	100.1	68.0	44.9	40.0	21.8	4.85
1.65V	510.8	325.3	240.1	220.5	139.9	98.2	66.8	44.1	39.3	21.4	4.76
1.70V	501.4	319.2	235.7	216.4	137.3	96.4	65.6	43.3	38.6	21.0	4.67
1.75V	491.9	313.2	231.2	212.3	134.7	94.6	64.3	42.5	37.8	20.6	4.58
1.80V	473.0	301.2	222.3	204.1	129.6	91.0	61.9	40.8	36.4	20.2	4.49

Note: The above data is based on average values and can typically be achieved within 3 charge/discharge cycles. Battery designs and specifications are subject to change without notice. Contact Valiant for the latest information.

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PERFORMANCE CHARACTERISTICS



BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container & Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Thick high Sn low Ca grid with special paste	Balanced Pb-Ca grid for improved recombination efficiency	Fire resistance ABS UL94-V0	Flame Si-Rubber and aging resister	Female Copper Insert M8(torque: 10~12N.m)	Advanced AGM separator for high pressure cell design	Dilute high purity sulphuric acid	Two layers epoxy resin seal