VALIANT: Providing Constant, Safe and Reliable Power



VRLA AGM SEALED LEAD ACID BATTERY

VTA12-100

The Valiant VTA series AGM batteries are designed for float and cycling applications. The VTA series offers a 30% higher cycle life than standard AGM and a 10-year float life that is achieved through a slightly different active paste material and a slightly stronger electrolyte. They are perfectly suited for UPS/Telecom, remote site, and emergency power systems.

12V Voltage









GENERAL FEATURES

- 30% more cycle life
- Deep discharge recovery, 700 cycles @ 50% DOD
- Thick plate design with high tin/low calcium alloy
- 10-year service life in float applications
- High power density

APPLICATIONS

- > Telecom, controls, remote site
- > UPS and inverter systems
- Solar and wind systems
- > Emergency backup power systems
- RV and marine

COMPLIED STANDARDS

Voltage 13.6-13.8V

Initial Charging Current Less than 25A

Voltage 14.4-14.9V



DIMENSIONS & WEIGHT

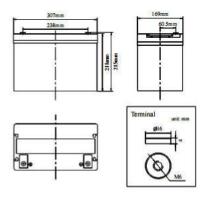
 Length(mm/inch)
 307/12.09

 Width(mm/inch)
 169/6.65

 Height(mm/inch)
 211/8.31

 Total Heigth(mm/inch)
 215/8.46

 Weight(kg/lbs)
 27/59.5



TECHNICAL SPECIFICATIONS

	12V(6 cells per unit)						
]	10 Years						
Nominal Capa	acity @25	$\mathbb{C}(10 \text{ hour ra})$	te@10.0A,10.8V)	100Ah			
		20hour	rate (5.55A,10.8V)	111Ah			
Capacity @25	$^{\circ}$	5 hour	rate (18.3A,10.5V)	91.5Ah			
		1 hour	rate (66.5A,9.6V)	66.5Ah			
Internal Resista	nce	Full Charge	d Battery@25℃	≤5.3mΩ			
			Discharge	-15℃~45℃			
Ambient Temper	ature		Charge	-15℃~45℃			
			Storage	-15℃~45℃			
M	Iax.Discha	arge Current@	025°C	600A(5s)			
G : CC .	Capacity affected by Temperature (10 hour)		40℃	105%			
1 2			25℃	100%			
			$0^{\circ}\mathbb{C}$	85%			
(10 nour)			-15℃	65%			
Sel	f-Dischar	ge@25℃ per	Month	3%			
	Stan	dby Use	Initial Charging Cur	rent Less than 25A			
Charge (Constant	Standby Ose		Voltage 13.6-13.8V				

BATTERY DISCHARGE TABEL

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

Cycle Use

Charge (Constant

Voltage) @25°C

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	168.8	105.1	75.4	66.5	40.5	29.6	19.1	11.6	10.40	5.77
1.65V	161.8	102.2	73.4	64.7	39.8	29.1	18.8	11.5	10.30	5.72
1.70V	154.8	99.4	71.3	63.0	39.1	28.6	18.5	11.4	10.20	5.66
1.75V	147.7	96.6	69.3	61.2	38.1	27.9	18.3	11.3	10.10	5.61
1.80V	140.7	93.8	67.3	59.4	37.2	27.2	18.0	11.2	10.00	5.55

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

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	314.9	195.9	140.6	124.1	75.6	55.3	35.6	21.7	19.4	10.8
1.65V	301.8	190.7	136.8	120.8	74.2	54.3	35.1	21.5	19.2	10.7
1.70V	288.6	185.4	133.0	117.4	72.8	53.3	34.6	21.3	19.0	10.6
1.75V	275.5	180.2	129.3	114.1	71.1	52.0	34.1	21.1	18.8	10.5
1.80V	262.4	174.9	125.5	110.8	69.4	50.7	33.6	20.9	18.7	10.4

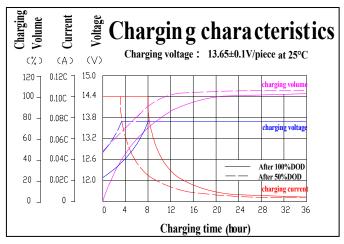
Note: The above data is based on average values and can typically be achieved within 3 charge/discharge cycles. Battery designs and specifications are subject to change without notice. Contact Valiant for the latest information.

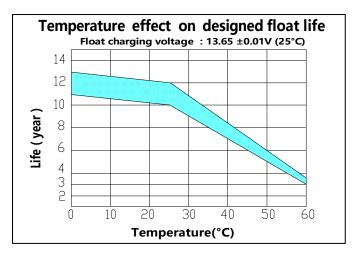


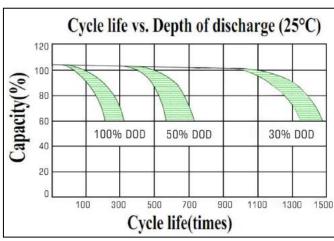
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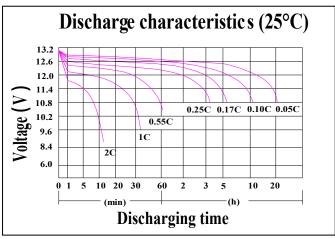
VTA12-100

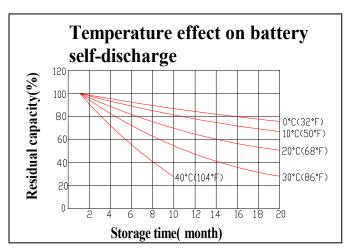
PERFORMANCE CHARACTERISTICS

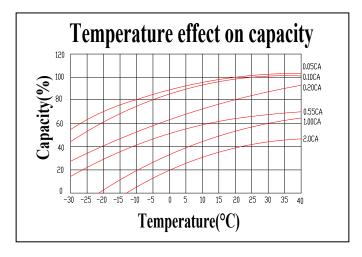












BATTERY CONSTRUCTION

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 resistance	Female Copper Insert M6	Advanced AGM separator for high pressure cell design	Dilute high purity sulfuric acid	Two layers epoxy resin seal