

WADKIN WHTD series deep cycle long life vrla amg battery uses a different chemistry additives in the positive plates and special AGM separators, WHTD series features 70% higher cyclic life with 12-15 years of float life when compared to the standard Duration range. This series is highly suited for very unreliable power applications requiring the batteries to provide extra cyclic life performance such as PV system applications, small RE systems and electric vehicles.

12V Voltage    160Ah Capacity    AGM Technology    Deep Cycle



### GENERAL FEATURES

- Thicker plate with high Tin low Calcium alloy
- High Reliability and Good Quality
- Deep Discharge Recovery
- High Power Density
- Longer Service Life, in both Float or Cyclic

### APPLICATIONS

- Solar Systems
- Wheel chair, Golf Cart
- Telecom systems
- Cable TV Systems
- Emergency Power System

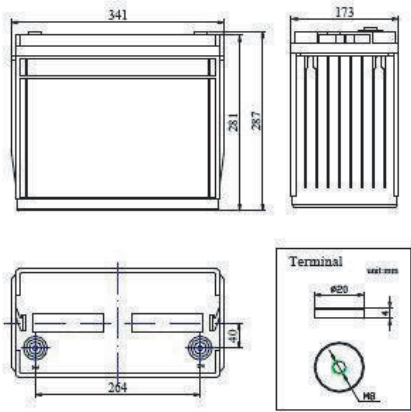


### COMPLIED STANDARDS

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

### DIMENSIONS & WEIGHT

Length(mm)	341 ± 1
Width(mm)	173 ± 1
Height(mm)	283 ± 1
Total Height(mm)	288 ± 1
Weight(kg)	43 ± 3%



### TECHNICAL SPECIFICATIONS

Nominal Voltage		12V(6 cells per unit)
Design Floating Life @25°C		15 Years
Nominal Capacity @25°C(100 hour rate@1.6A, 9.6V)		160Ah
Capacity @25°C	20 hour rate (7.29A, 9.6V)	145Ah
	10hour rate (12.2A, 10.8V)	134Ah
	5 hour rate (21.5A, 10.5V)	115Ah
Internal Resistance	Full Charged Battery@25°C	≤3.6mΩ
Ambient Temperature	Discharge	-15°C~45°C
	Charge	-15°C~45°C
	Storage	-15°C~45°C
Max charge Current@25°C		40A
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 27A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 27A Voltage 14.4-14.9V

### BATTERY DISCHARGE TABEL

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

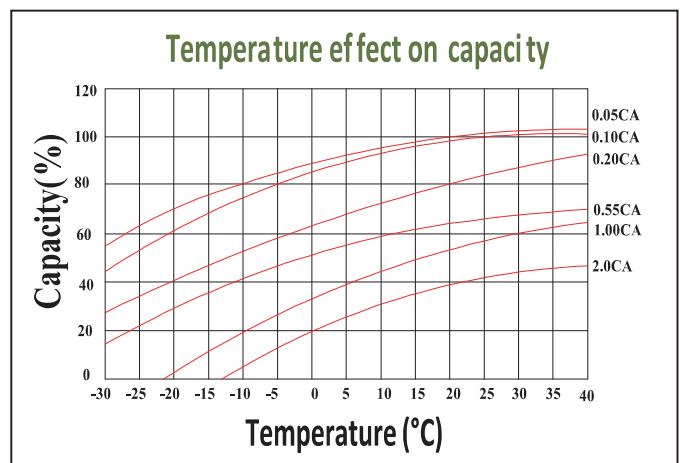
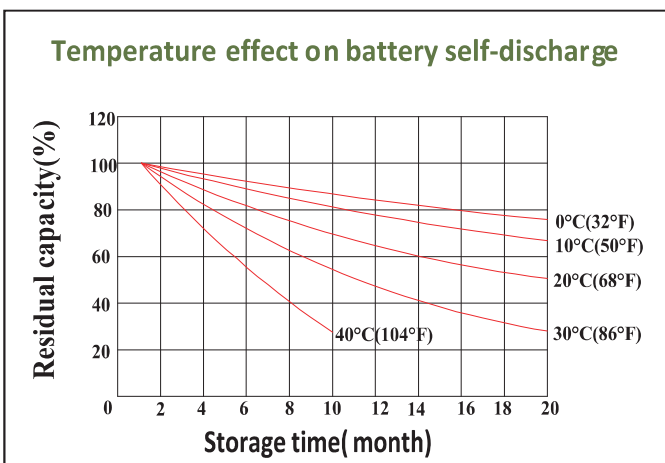
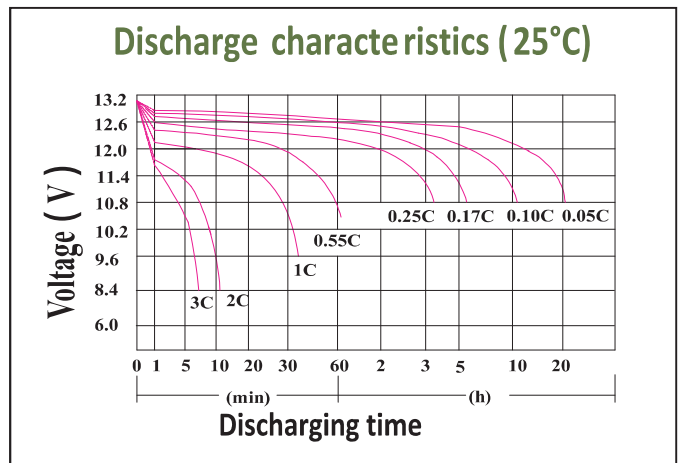
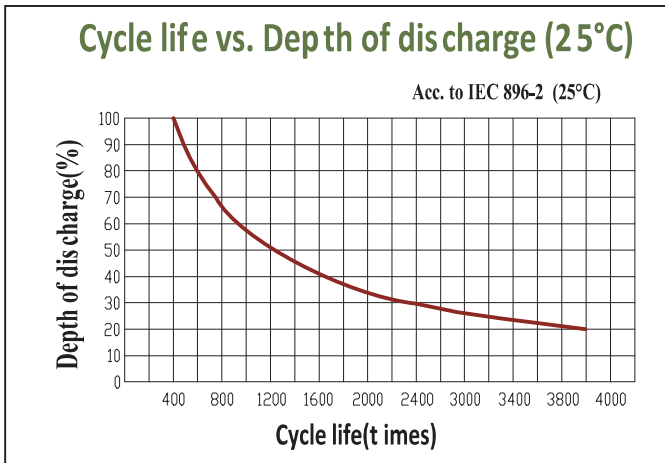
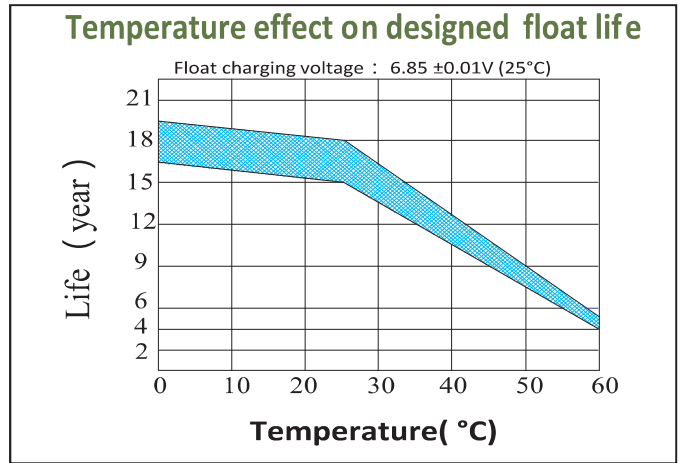
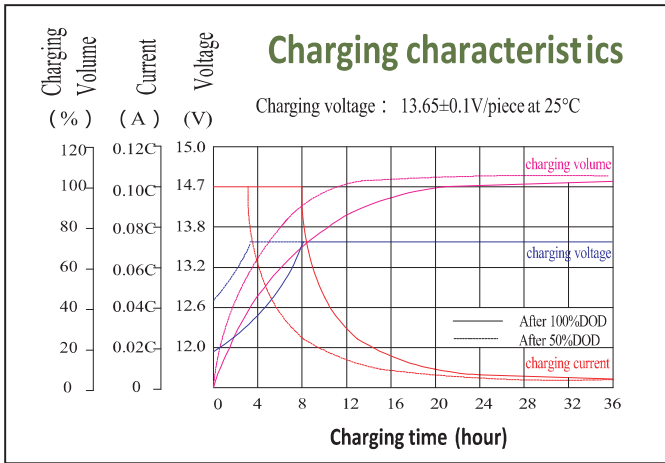
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	210.9	125.5	89.1	78.0	47.6	33.4	23	15.0	13.4	7.29	1.62
1.65V	207.0	123.2	87.5	76.5	46.7	32.8	22.3	14.7	13.1	7.16	1.59
1.70V	203.2	120.9	85.9	75.1	45.9	32.2	21.9	14.5	12.9	7.02	1.56
1.75V	199.4	118.6	84.2	73.7	45.0	31.6	21.5	14.2	12.6	6.89	1.53
1.80V	191.7	114.1	81.0	70.9	43.3	30.4	20.7	13.6	12.2	6.75	1.50

#### 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	405.9	241.6	171.5	150.1	91.6	64.3	43.7	28.9	25.7	14.0	3.12
1.65V	398.5	237.2	168.4	147.3	90.0	63.1	42.9	28.3	25.3	13.8	3.06
1.70V	391.2	232.8	165.3	144.6	88.3	62.0	42.1	27.8	24.8	13.5	3.00
1.75V	383.8	228.4	162.2	141.9	86.6	60.8	41.4	27.3	24.3	13.3	2.94
1.80V	369.0	219.6	155.9	136.4	83.3	58.5	39.8	26.2	23.4	13.0	2.88

Note: Remain Capacity @ 25A 260MIN - Remain Capacity @ 75A 75 MIN

### 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(torgue :10~11N.m	Advanced AGM separator for high pressure cell design	Dilute high purity sulphuric acid	Two layers epoxy resin seal