

Deep Cycle VRLA Battery **HTD12-20**

The HTL series uses a different chemistry additives in the positive plates and special AGM separators, The HTL series features 70% higher cyclic life with 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 **20Ah** Capacity **AGM** Technology **Deep** Cycle



COMPLIED STANDARDS

IEC 60896-21/22 JIS C8704
IEC61427 BS6290 part4
GB/T 19638 CE/ISO

GENERAL FEATURES

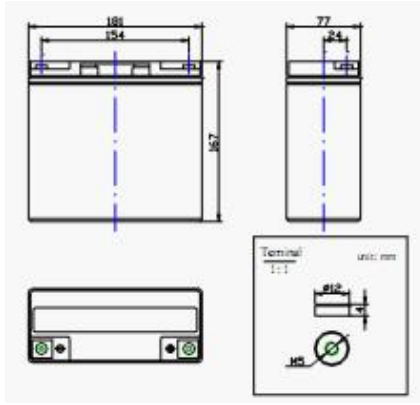
- Thick plate with high Tin low Calcium alloy
- High Reliability and Good Quality
- Deep Discharge Recovery
- High Power Density
- Long Service Life, in Float or Cyclic

APPLICATIONS

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

DIMENSIONS & WEIGHT

Length(mm)	181 ± 1
Width(mm)	77 ± 1
Height(mm)	167 ± 1
Total Height(mm)	167 ± 1
Weight(kg)	6 ± 3%



TECHNICAL SPECIFICATIONS

Nominal Voltage		12V(6 cells per unit)
Design Floating Life @25°C		15 Years
Nominal Capacity @25°C (20 hour rate@1.0A,10.8V)		20Ah
Capacity @25°C	10hour rate (1.8A,10.8V)	18Ah
	5 hour rate (3.2A,10.5V)	16Ah
	1 hour rate (11.1A,9.6V)	11.1Ah
Internal Resistance	Full Charged Battery@25°C	≤12.0mΩ
Ambient Temperature	Discharge	-15°C~45°C
	Charge	-15°C~45°C
	Storage	-15°C~45°C
Max.Discharge Current@25°C		120A(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 6.0A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 6.0A 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	25.7	16.4	12.1	11.1	7.0	5.0	3.4	2.2	2.0	1.1	25.7
1.65V	25.3	16.1	11.9	10.9	6.9	4.9	3.3	2.2	1.9	1.08	25.3
1.70V	24.8	15.8	11.6	10.7	6.8	4.8	3.2	2.1	1.9	1.06	24.8
1.75V	24.3	15.5	11.4	10.5	6.7	4.7	3.2	2.1	1.9	1.04	24.3
1.80V	23.4	14.9	11.0	10.1	6.4	4.5	3.1	2.0	1.8	1.00	23.4

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

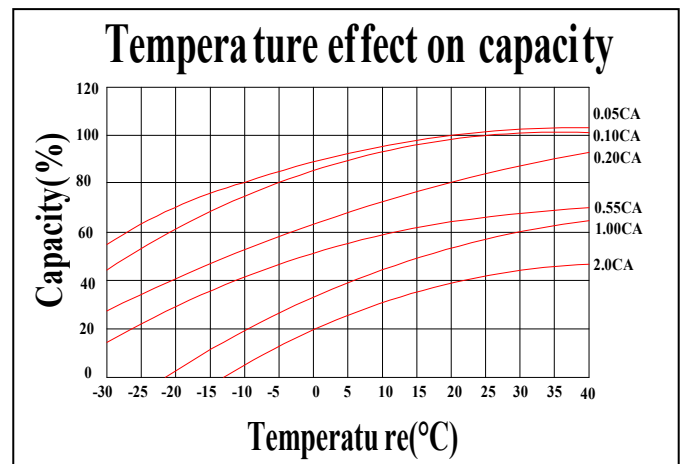
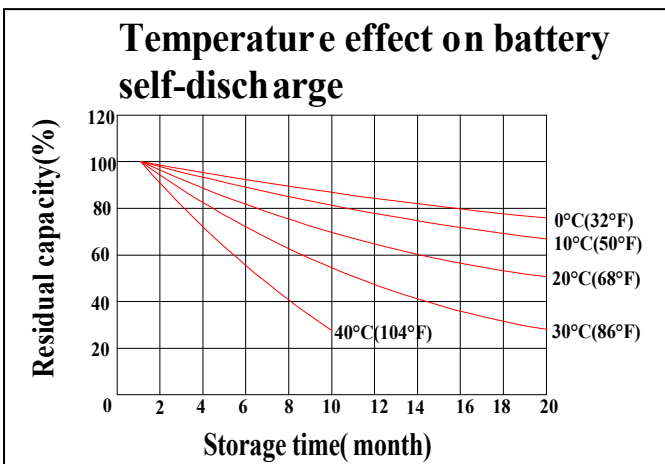
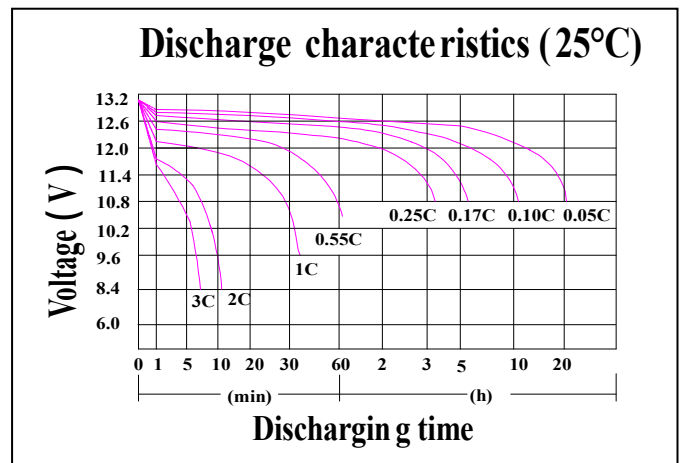
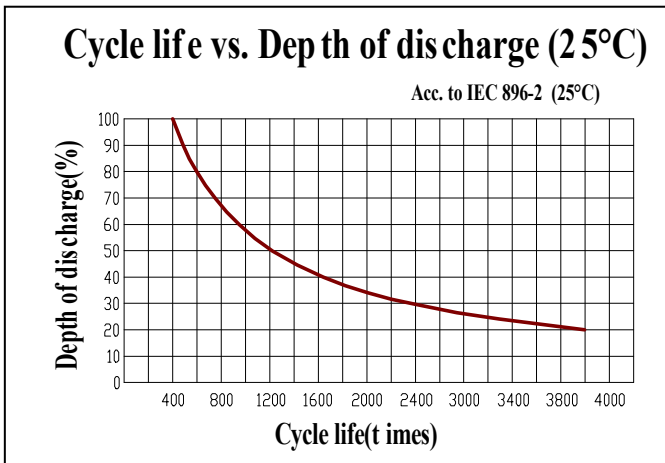
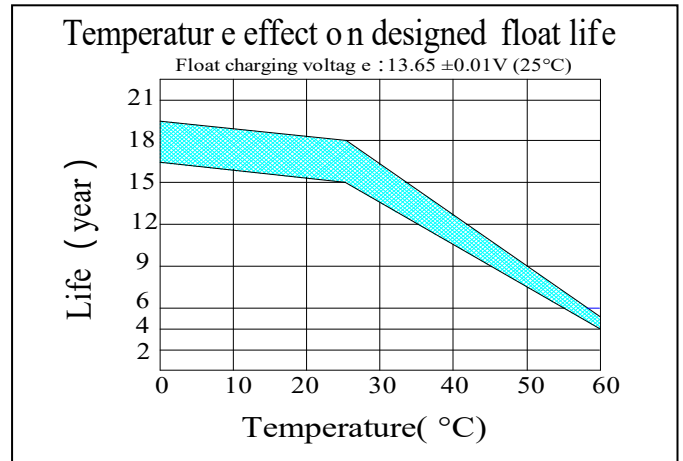
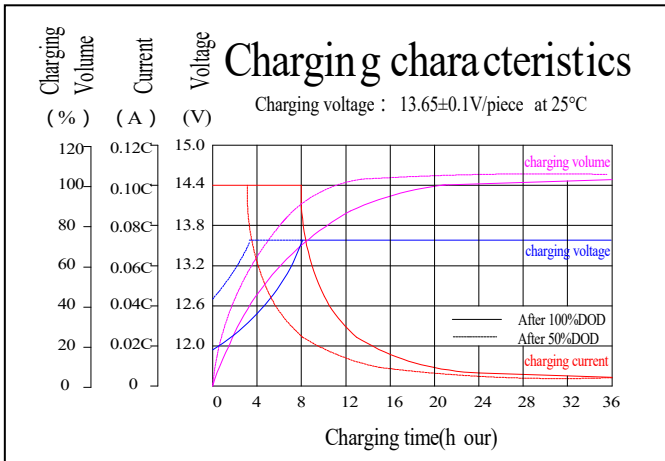
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	74.7	45.5	30.5	28.2	16.3	11.4	7.8	5.1	4.6	2.5	0.55
1.65V	73.3	44.7	29.9	27.7	16.0	11.2	7.6	5.0	4.5	2.4	0.54
1.70V	72.0	43.8	29.4	27.2	15.7	11.0	7.5	4.9	4.4	2.4	0.53
1.75V	70.6	43.0	28.8	26.7	15.4	10.8	7.4	4.9	4.3	2.4	0.52
1.80V	67.9	41.3	27.7	25.6	14.8	10.4	7.1	4.7	4.2	2.3	0.51

Note The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact **CSPOWER** for the latest information.

Deep Cycle VRLA Battery

HTD12-20

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	ABS (UL94-V0 optional)	Flame Si-Rubber aging resistant	Female Copper Insert M6 (torque : 3~4N.m)	Advanced AGM separator for high pressure cell design	Dilute high purity sulphuric acid	Two layers epoxy resin seal