

High Temperature Long Life GEL Battery

MSHTL12-250

The HTL series uses the newly developed nano gel electrolyte with super-C additive plus heavy duty plates design inside. The HTL series has a long service life and can provide optimum and reliable service under extreme condition such as high temperature and frequent power failure, This series is highly suited for tropical area in outdoor applications such as Telecom BTS stations and Off-grid PV system.

12V Voltage	250Ah Capacity	Gel Technology	Deep Cycle
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COMPLIED STANDARDS

IEC 60896-21/22	JIS C8704
YD/T1360	BS6290 part4
GB/T 19638	CE

GENERAL FEATURES

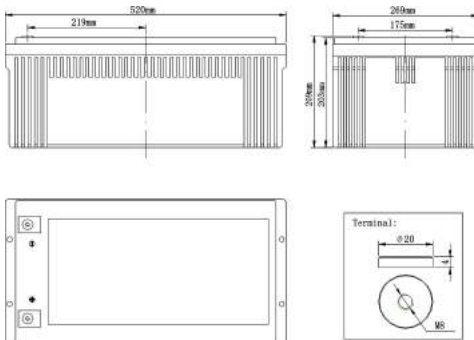
- Able to operate at 60°C
- Integrated design to ensure the best uniformity and reliability
- Long life and high stability under high temp. environment (no air-con needed)
- Use super-C additives: Deep discharge recovery capability

APPLICATIONS

- BTS Stations
- Solar & Wind energy system
- UPS system
- Telecom systems
- Wheel chair, Golf Car

DIMENSIONS & WEIGHT

Length(mm)	520 ± 1
Width(mm)	269 ± 1
Height(mm)	203 ± 1
Total Height(mm)	207 ± 1
Weight(kg)	71.3 ± 3%



TECHNICAL SPECIFICATIONS

Nominal Voltage		12V (6 cells per unit)
Design Floating Life @25°C		20 Years
Nominal Capacity @25°C (20 hour rate@12.5A,10.8V)		250Ah
Capacity @25°C	10hour rate (22.6A,10.8V)	226Ah
	5 hour rate (38.9A,10.5V)	194.5Ah
	1 hour rate (142.0A,9.6V)	142Ah
Internal Resistance	Full Charged Battery@25°C	≤3.0mΩ
Ambient Temperature	Discharge	-25°C~60°C
	Charge	-25°C~60°C
	Storage	-25°C~45°C
Max.Discharge Current@25°C		1500A(5s)
Capacity affected by Temperature (10 hour)	40°C	108%
	25°C	100%
	0°C	90%
	-15°C	70%
Self-Discharge@25°C per Month		3%
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than 62.5A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 62.5A Voltage 14.4-14.9V

BATTERY DISCHARGE TABEL

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

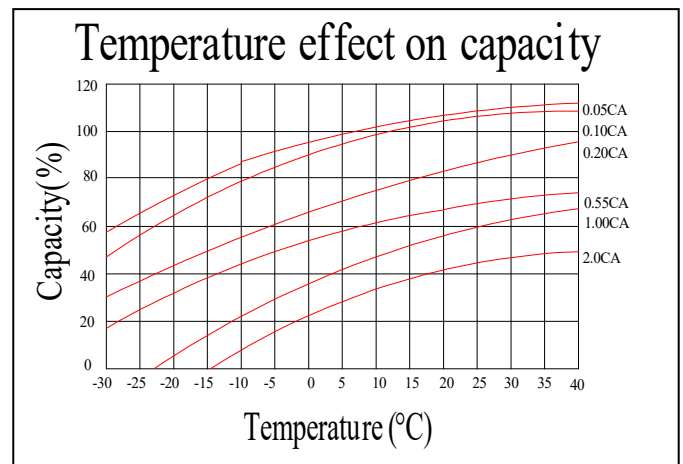
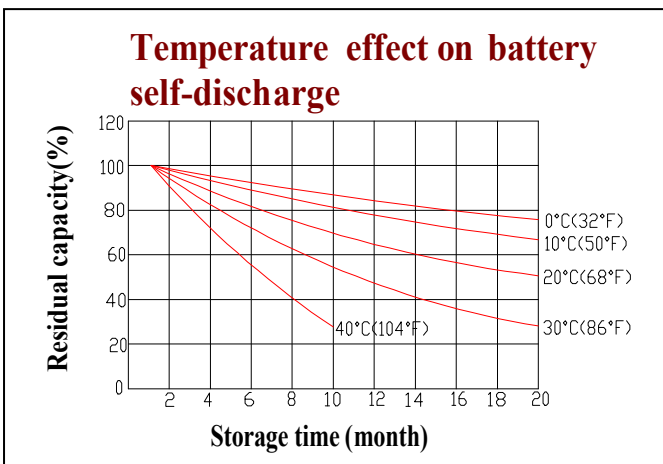
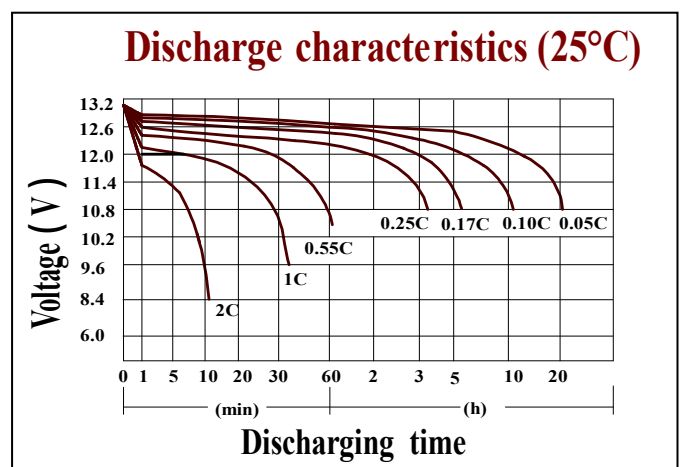
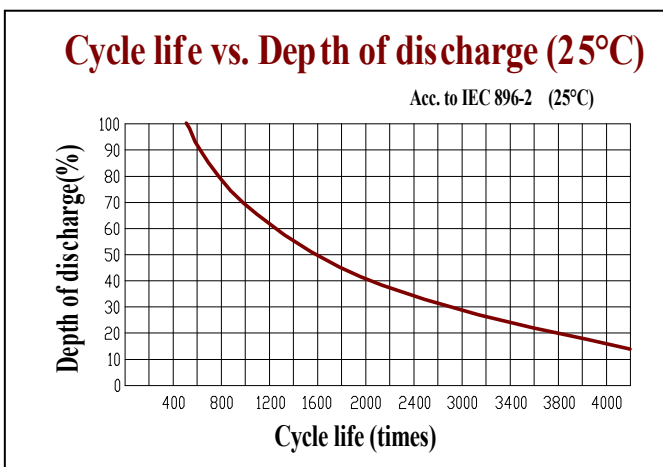
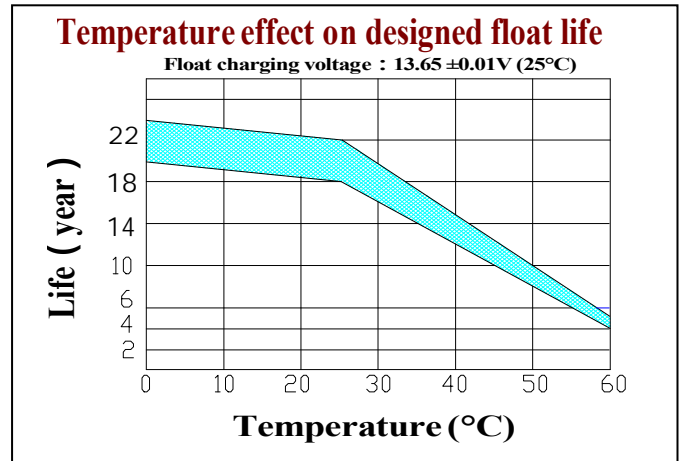
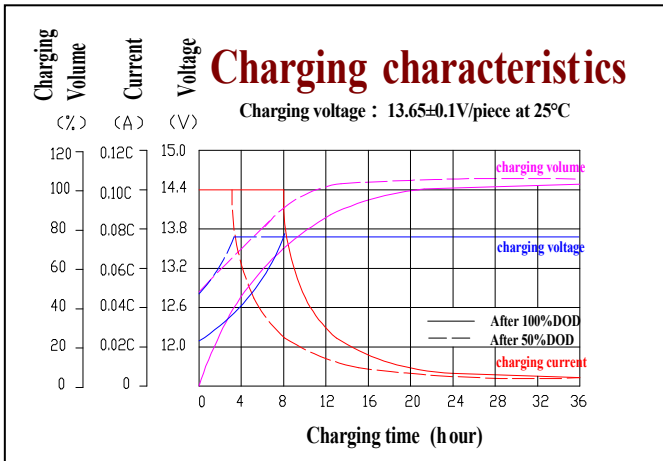
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	382.4	227.7	161.2	142.0	86.1	60.5	41.14	27.2	24.3	13.3	2.98
1.65V	375.6	223.6	158.4	139.3	84.6	59.4	40.4	26.7	23.8	13.1	2.92
1.70V	368.8	219.5	155.6	136.6	83.1	58.3	39.7	26.2	23.3	12.9	2.87
1.75V	362.0	215.4	152.8	133.9	81.6	57.2	38.9	25.7	22.9	12.7	2.82
1.80V	355.1	211.3	150.0	131.3	80.1	56.2	38.2	25.2	22.6	12.5	2.77

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	736.0	438.0	305.6	272.0	166.0	116.7	79.2	52.4	45.9	25.6	5.74
1.65V	722.8	430.2	300.1	267.1	163.1	114.6	77.8	51.5	45.0	25.2	5.64
1.70V	709.7	422.4	294.6	262.3	160.2	112.5	76.4	50.6	45.1	24.8	5.54
1.75V	696.6	414.6	289.1	257.6	157.3	110.4	75.0	49.7	44.2	24.4	5.44
1.80V	683.5	406.8	283.6	252.8	154.3	108.3	73.7	48.7	43.3	24.0	5.34

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 **monosun** for the latest information.

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 and aging resistant	Female Copper Insert M8 (torque : 10~12N.m)	PVC	Silicon Gel	Two layers epoxy resin seal

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