

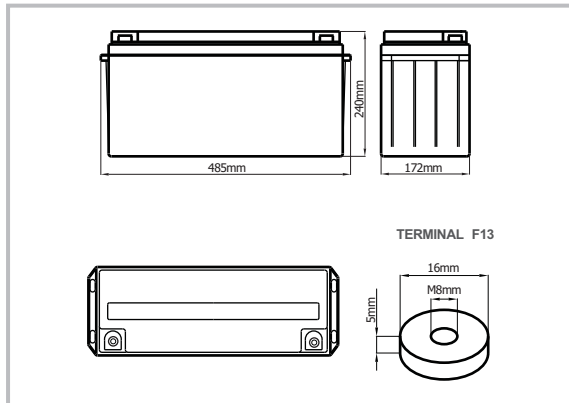
# HXG12-150(12V150Ah)



## HXG DEEP CYCLE GEL VRLA BATTERY

HXG Series, with its proprietary grid alloy and paste formulation, provides superior performance in both high cycling and floating applications. By combining the newly developed Nano Gel electrolyte with high density paste, the HXG series offers high recharge efficiency at very low charge current. The acid stratification is highly reduced by adding Nano Gel. It is suitable for off-grid photovoltaic, wind or hydro power application.

## BATTERY DIMENSIONS




## TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	12 Years
Nominal Capacity (20°C)	150 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L485mm x W172mm x H240mm
Approx. Weight	43.0 kg (94.8 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.0035 Ohm (fully charged @ 20°C)
Max. Charge Current	37.5A
Max. Discharge Current (5S)	1000 A
Short Circuit Current	3400 A
Self Discharge	Approx. 3% per month @ 20°C
Ambient Temperature	Discharge: -15~50°C Charge: -15~40°C Storage: -15~40°C
Float Charge Voltage (20~25°C)	13.6-13.8V (-3mV/ cell/ °C)
Equalize and cycle Use Charge Voltage (20~25°C)	14.4-14.8V (-5mV/ cell / °C)
Container Material	ABS (UL94-V0 optional)




ISO9001      ISO14001




**Complied standards**

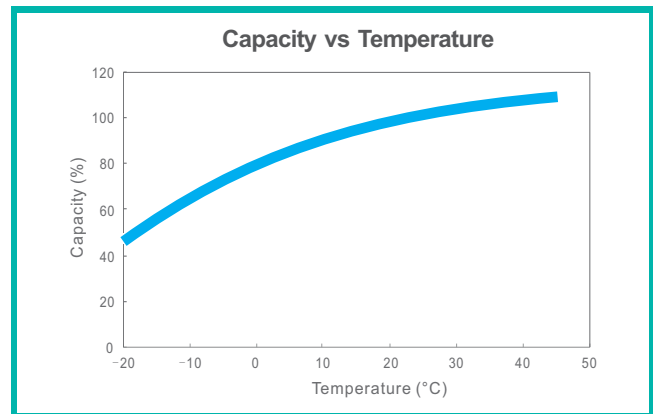
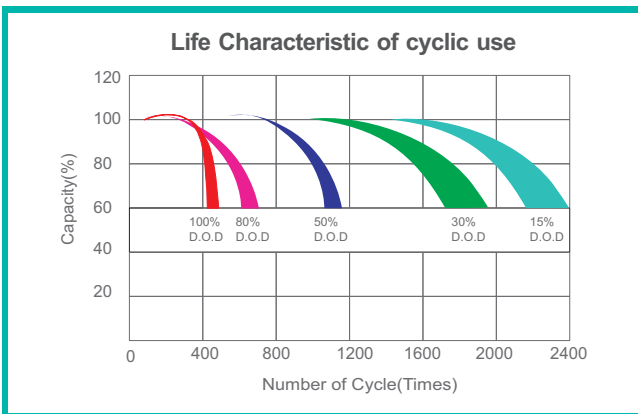
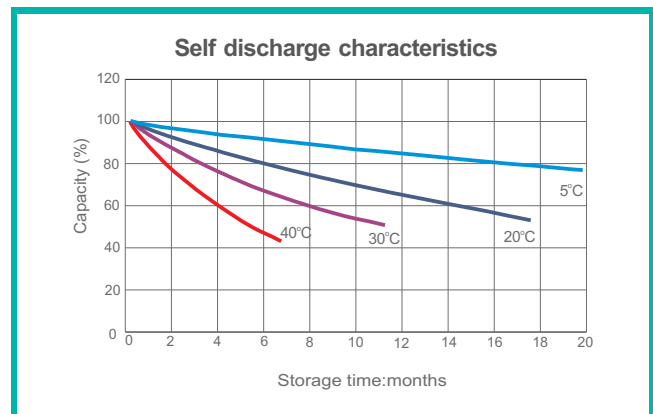
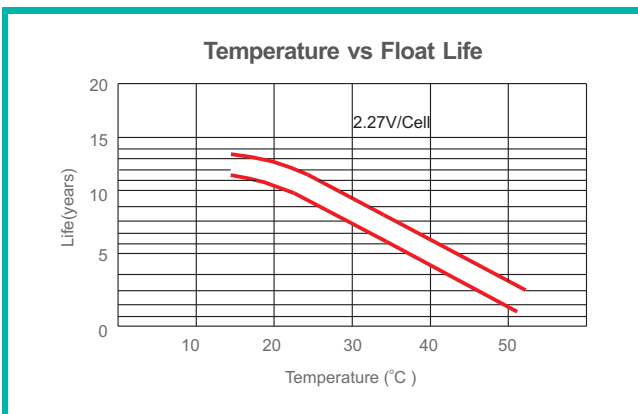
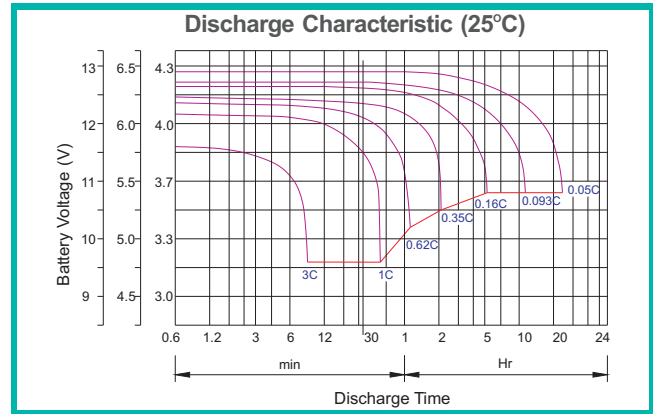
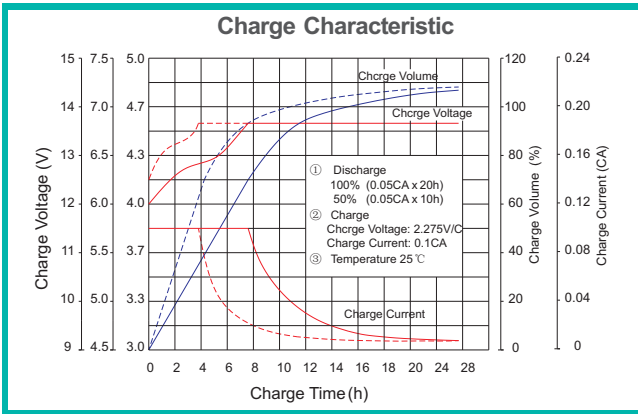
- IEC 60896-21/22
- UL1989
- JIS C8704
- GB/T19639

## BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5 m in	10 m in	15 m in	30 m in	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	450	332	274	169	101	58.9	42.5	33.9	28.2	19.3	15.9	8.57
1.67V	402	306	258	161	98.7	57.9	42.0	33.4	27.8	19.0	15.7	8.37
1.70V	358	278	244	155	96.4	57.1	41.5	33.1	27.6	18.8	15.5	8.18
1.75V	312	258	227	150	94.5	56.1	40.9	32.7	27.3	18.5	15.3	8.03
1.80V	276	235	211	143	91.4	54.9	40.1	32.0	26.6	18.1	15.0	7.87
1.85V	236	211	193	135	87.4	52.8	38.8	31.1	26.0	17.7	14.6	7.69

Constant Power Discharge Characteristics: W/cell (25°C)												
F.V/Time	5 m in	10 m in	15 m in	30 m in	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	792	597	500	312	189	111	80.2	64.2	53.7	37.0	30.7	16.6
1.67V	716	556	475	300	185	110	79.8	63.8	53.5	36.8	30.5	16.4
1.70V	647	510	453	291	182	109	79.4	63.6	53.3	36.6	30.4	16.1
1.75V	570	479	425	283	180	108	78.8	63.4	53.1	36.4	30.2	15.9
1.80V	510	441	400	273	175	106	78.0	62.5	52.2	35.8	29.8	15.7
1.85V	444	402	368	260	170	103	76.1	61.2	51.4	35.3	29.2	15.5

## CHARACTERISTICS



### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80V	1.75V	1.70V	1.60V
Discharge Current I /A	I < 0.2C	0.2C ≤ I < 0.6C	0.6C ≤ I < 1.0C	I ≥ 1.0C

**Charge the batteries at least once every six months, if they are stored at 25°C.**

### Charging Method:

Constant Voltage	0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.25CA
Constant Current	0.2Cx2h+0.1CAx12h
Fast	0.2Cx2h+0.3CAx4.0h

### Maintenance & Cautions

#### Cycle service

- ※ Avoid battery over discharge, especially battery series connection use.
- ※ Charged with recommend voltage, ensure battery can be full recharged.
- In general, recharge capacity should be 1.1-1.15 times discharge capacity.
- ※ Effect of temperature on cycle charge voltage: -5mV/°C/Cell.
- ※ There are a number of factors that will affect the length of cyclic service.
- The most significant are depth of discharge, ambient temperature, discharge rate, and the battery recharge mode.
- Generally speaking, the most important factors is depth of discharge.