

GTAD12-150 12V150AH

DEEP CYCLE BATTERY - DC SERIES



Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	150Ah	
Dimensions	Length	484 ±3mm
	Width	170 ±2mm
	Height	242 ±2mm
	Total height	247 ±2mm
Approx. Weight	43.3kg	
Terminal Type	T11	
Container Material	ABS	
Rated Capacity (25°C°)	20HR (1.80V)	159.4Ah
	10HR (1.75V)	150Ah
	5HR (1.75V)	131.5Ah
	3HR (1.75V)	119.4Ah
	1HR (1.60V)	96.9Ah
Max. Discharge Current	1500A (5 sec.)	
Internal Resistance (Fully charged, 25°C)	Approx. 2.5mΩ	
Operating Temp. Range	Discharge	-15°C~50°C (5°F~122°F)
	Charge	0~40°C (32°F~104°F)
	Storage	-15°C~40°C (5°F~104°F)
Nominal Operating Temp.	25°C±3°C (77°F±5°F)	
Cyclic Charging Voltage (25°C)	Initial Charging Current less than 45.0A. Voltage 14.6V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C	
Float Charging Voltage (25°C)	No limit on Initial Charging Current Voltage 13.6V~13.7V at 25°C (77°F) Temp. Coefficient -20mV/°C	
Capacity affected by temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self-discharge (25°C)	Global Power batteries may be stored for up to 6 months at 25°C (77°F) and battery should be recharged before use. For higher temperatures the time interval will be shorter.	

Applications

- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ Solar Power System

Constant current discharge characteristics unit: Ampere/Block (at 25°C, 77°F)

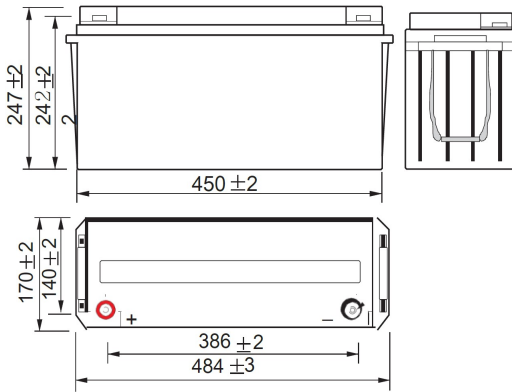
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	393.8	296.1	244.2	170.1	123.8	96.9	58.2	43.9	35.1	28.6	24.5	19.1	15.8	8.42
1.65V/cell	362.7	276.9	229.2	156.3	118.7	93.6	56.3	42.6	34.1	27.7	23.9	18.9	15.6	8.37
1.70V/cell	336.1	260.4	215.8	148.2	115.8	90.5	54.8	40.9	32.9	27.0	23.4	18.6	15.3	8.27
1.75V/cell	308.3	243.9	205.3	142.3	111.4	87.8	52.7	39.8	32.1	26.3	23.0	18.3	15.0	8.04
1.80V/cell	280.6	223.3	190.9	137.1	107.3	83.9	50.8	39.0	31.4	25.6	22.3	18.0	14.8	7.97
1.85V/cell	219.6	184.8	161.5	116.2	92.3	74.9	46.5	36.3	29.4	23.9	20.8	17.0	14.2	7.65

Constant power discharge characteristics unit: Watt/Block (at 25°C, 77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	689.0	530.7	445.2	306.0	232.6	183.7	111.1	84.3	67.7	55.5	47.8	37.5	31.1	16.8
1.65V/cell	645.6	502.2	422.3	292.8	225.2	178.8	108.1	82.2	65.9	54.0	46.9	37.2	30.8	16.7
1.70V/cell	602.5	475.4	399.4	278.8	220.6	173.6	105.5	79.0	63.9	52.6	46.0	36.7	30.2	16.5
1.75V/cell	560.6	448.6	382.2	268.9	212.7	168.7	101.7	77.1	62.4	51.4	45.1	36.2	30.0	16.2
1.80V/cell	516.6	414.7	358.2	260.3	205.9	161.9	98.3	75.9	61.1	50.2	44.0	35.6	29.7	16.1
1.85V/cell	409.8	348.4	307.7	223.3	178.5	145.4	90.7	70.9	57.5	46.9	41.1	33.6	28.0	15.9

Note 1: The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

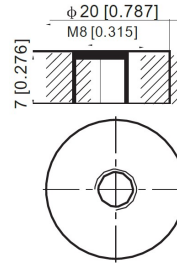
Outer dimensions (mm)



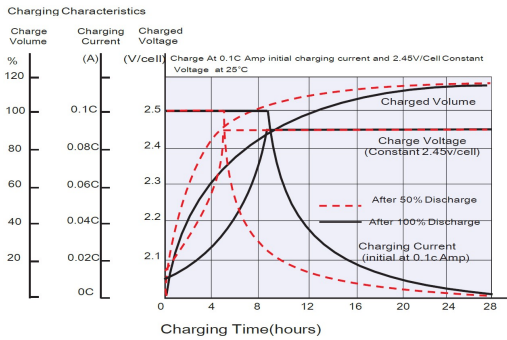
Terminal type (mm)

T11 Terminal

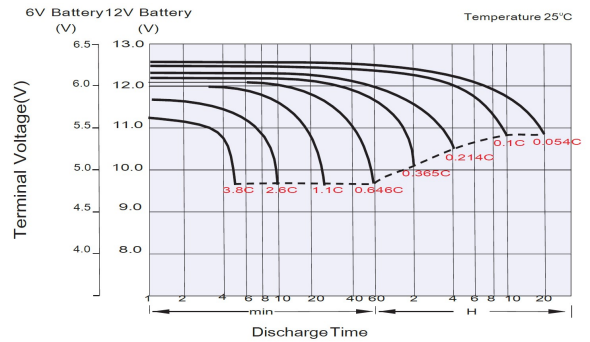
Unit: mm [inches]



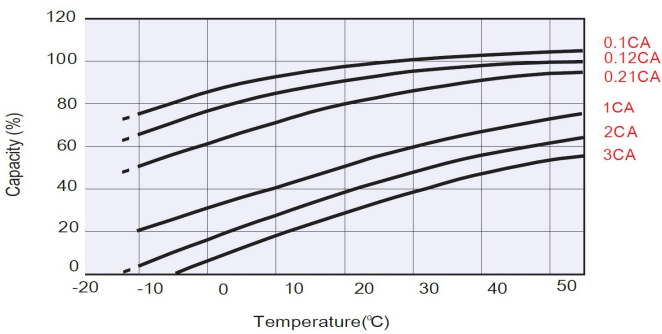
Float Charging Characteristics



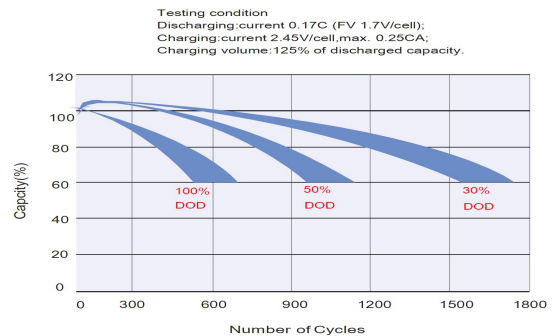
Discharge Characteristics



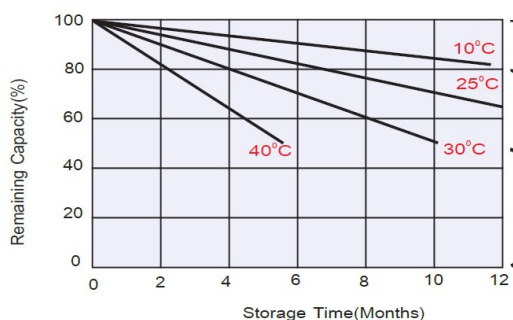
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



No supplementary charge required

(Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way as below:

1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8~10 hours at limited current 0.05CA.

Supplementary charge may often fail to recover the capacity.

The battery should never be left standing till this is reached.