

GTAD12-55 12V55AH

DEEP CYCLE BATTERY - DC SERIES



Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	55Ah	
Dimensions	Length	228.5±2mm
	Width	138.5±2mm
	Height	210±2mm
	Total height	216±2mm
Approx. Weight	15.3kg	
Terminal Type	T6	
Container Material	ABS	
	20HR (1.80V)	59Ah
	10HR (1.75V)	55Ah
	5HR (1.75V)	48.3Ah
	3HR (1.75V)	43.8Ah
	1HR (1.60V)	35.5Ah
Rated Capacity (25°C)		
Max. Discharge Current	660A (5 sec.)	
Internal Resistance (Fully charged, 25°C)	Approx. 7.6mΩ	
Operating Temp. Range	Discharge	-15°C~50°C (5°F~122°F)
	Charge	0°C~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 16.5 A. Voltage 14.6V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°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%
Float Charging Voltage (25°C)		
Self-discharge (25°C)	Global Power DC series 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

Remarks:

- Use in normal climate environment with standard range of regulated powered electricity.
- Falling, hitting, bending, etc. may cause degradation of battery characteristics.

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

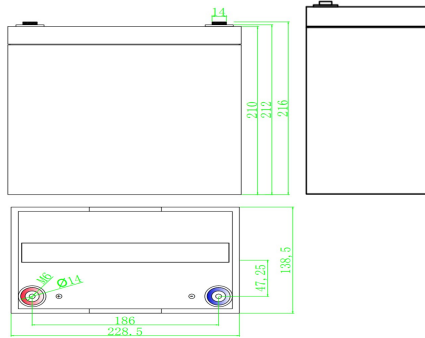
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	144.4	108.6	89.5	60.5	45.4	35.5	21.3	16.1	12.9	10.5	8.97	6.99	5.79	3.09
1.65V/cell	133.0	101.5	84.1	57.3	43.5	34.3	20.6	15.6	12.5	10.2	8.78	6.93	5.73	3.07
1.70V/cell	123.2	95.5	79.1	54.3	42.5	33.2	20.1	15.0	12.1	9.89	8.59	6.82	5.61	3.03
1.75V/cell	113.1	89.4	75.3	52.2	40.8	32.2	19.3	14.6	11.8	9.65	8.42	6.73	5.50	2.98
1.80V/cell	102.9	81.9	70.0	50.3	39.4	30.8	18.6	14.3	11.5	9.40	8.19	6.61	5.43	2.95
1.85V/cell	80.5	67.8	59.2	42.6	33.8	27.5	17.1	13.3	10.8	8.76	7.64	6.23	5.19	2.92

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

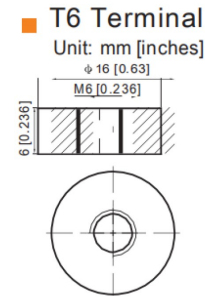
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	252.6	194.6	163.2	112.2	85.3	67.4	40.7	30.9	24.8	20.3	17.5	13.8	11.4	6.14
1.65V/cell	236.7	184.2	154.8	107.3	82.6	65.6	39.6	30.1	24.2	19.8	17.2	13.6	11.3	6.11
1.70V/cell	220.9	174.3	146.4	102.2	80.9	63.7	38.7	29.0	23.4	19.3	16.9	13.5	11.1	6.04
1.75V/cell	205.6	164.5	140.1	98.6	78.0	61.9	37.3	28.3	22.9	18.9	16.5	13.3	11.0	5.94
1.80V/cell	189.4	152.0	131.4	95.4	75.5	59.4	36.1	27.8	22.4	18.4	16.1	13.1	10.9	5.89
1.85V/cell	150.2	127.7	112.8	81.9	65.5	53.3	33.2	26.0	21.1	17.2	15.1	12.3	10.3	5.84

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

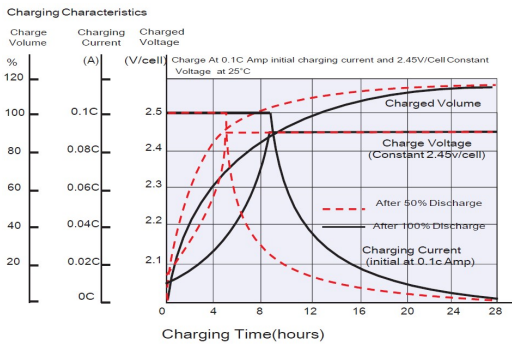
Outer dimensions (mm)



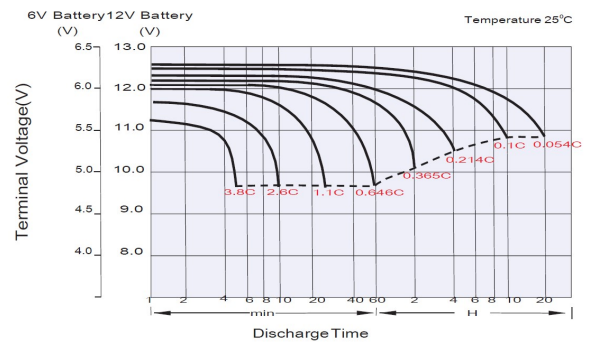
Terminal type (mm)



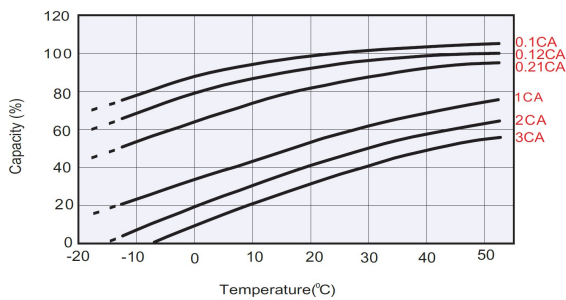
Charging Characteristics (cycle use)



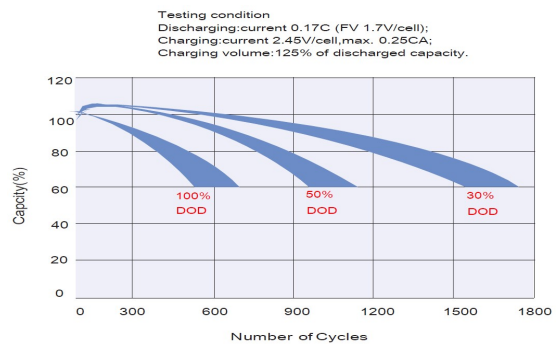
Discharge Characteristics



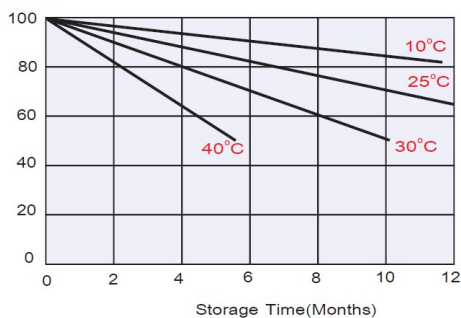
Temperature Effects in Relation to Battery Capacity



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.