GTAD12-150 12V150AH

DEEP CYCLE BATTERY - DC SERIES



Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	150Ah	
Dimensions	Length Width Height Total height	485±2mm 172±2mm 240±2mm 240±2mm
Approx. Weight	44.5kg±3%	
Terminal Type	T16	
Rated Capacity (25°C)	10HR (10.8V) 3HR (10.8V) 1HR (10.5V)	150Ah 114Ah 88Ah
Max. Discharge Current	1200A (5 sec.)	
Max. Charging Current	45A	
Internal Resistance (Fully charged, 25°C)	Approx. 3.5mΩ	
Operating Temp. Range	Discharge Charge Storage	-15°C~50°C (5°F~122°F) -10°C~50°C (14°F~122°F) -20°C~50°C (-4°F~122°F)
Nominal Operating Temp.	25°C±3°C (77°F±5°F)	
Cyclic Charging Voltage (25°C)	14.60 to 15.00V Temperature compensation : -30mV/°C	
Float Charging Voltage (25°C)	13.60 to 13.70V Temperature compensation: -18mV/°C	
Capacity affected by temperature (10HR)	40°C 25°C 0°C -15°C	102% 100% 85% 65%
Self-discharge (25°C)	3 months 6 months 12 months	Remaining capacity: 91% Remaining capacity: 82% Remaining capacity: 65%
Design Life	10 years for floating (25°C)	

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.

Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

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

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	336	259	155	95.2	56.3	40.5	32.4	27.6	19.0	15.7	8.31
9.90V	326	253	152	93.7	55.9	40.3	32.2	27.5	18.9	15.6	8.29
10.2V	312	243	147	91.4	55.4	40.0	31.9	27.3	18.8	15.6	8.27
10.5V	299	235	143	88.5	54.6	39.7	31.7	27.1	18.6	15.5	8.22
10.8V	282	222	138	85.7	53.2	38.5	30.8	26.3	18.1	15.4	8.16

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

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	3626	2841	1737	1085	652	477	381	327	226	187	99.7
9.90V	3517	2773	1702	1069	648	474	378	325	224	187	99.5
10.2V	3372	2670	1650	1042	642	471	376	323	223	186	99.2
10.5V	3227	2579	1610	1009	632	467	373	320	221	185	98.6
10.8V	3046	2443	1551	976	616	453	362	311	215	184	97.9

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

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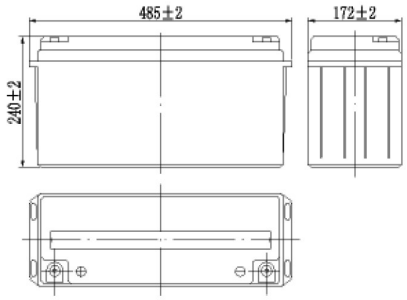
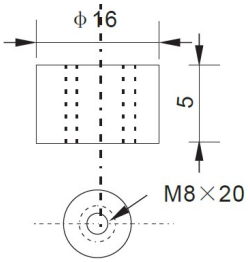
Outer dimensions (mm)

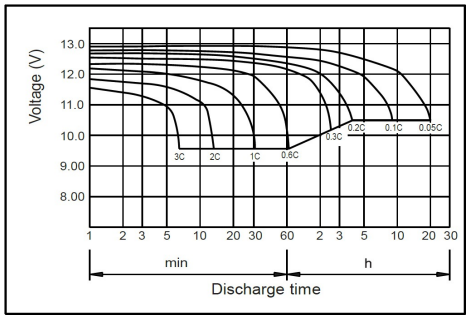


Terminal type (mm)

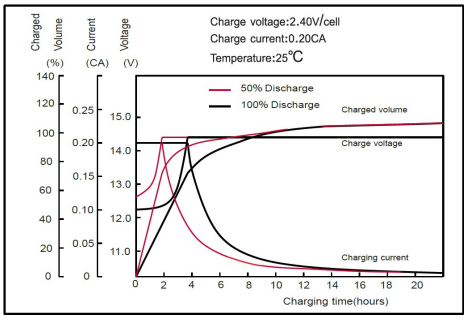


T16

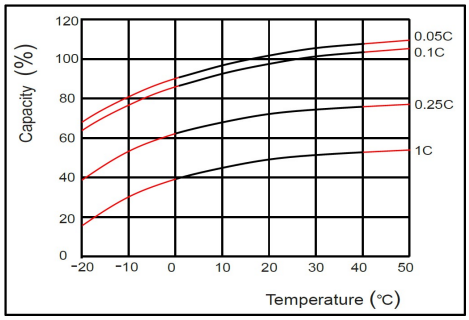
Discharge characteristics (25°C)



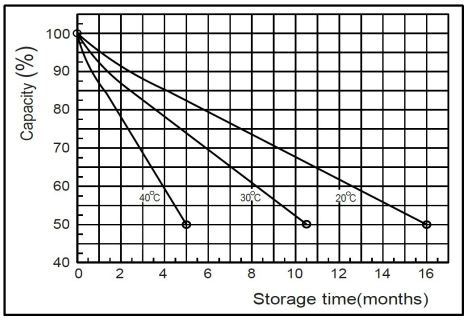
Charging characteristics (25°C)



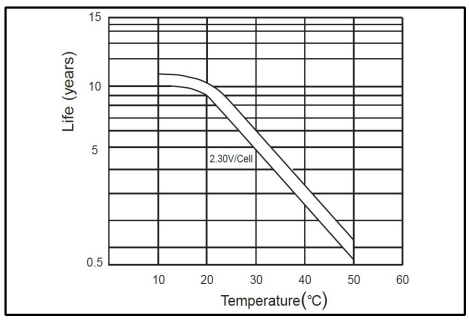
Temperature effects on capacity



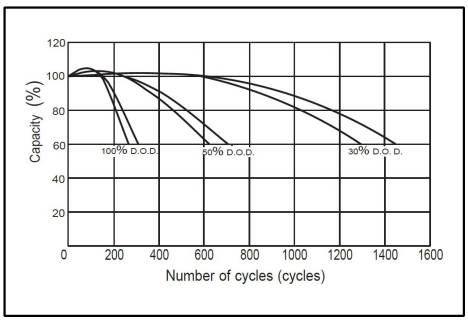
Self-discharge characteristics



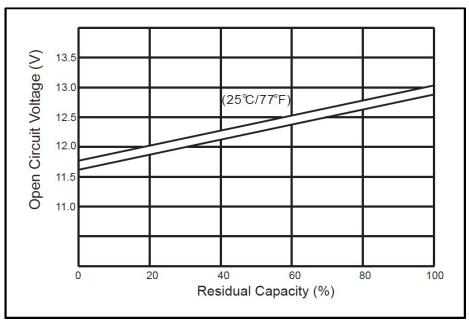
Floating life on temperature



Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Relationship for charging voltage and temperature

