



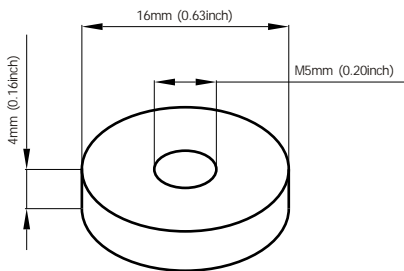
HR(Hight Rate) range has been developed with high efficiency active materials to stimulate inside the battery with higher power output when the battery is discharged to a extent level. With high-density structure the inner resistance can be reduced to a relatively lower level, which will significantly improve the performance for high rate discharging when high power output service is needed.

### Applications

- Electric Car & Scooter
- Toys and Spot Light
- Photovoltaic Solar System
- Marine Application
- UPS
- Toy

### General Features

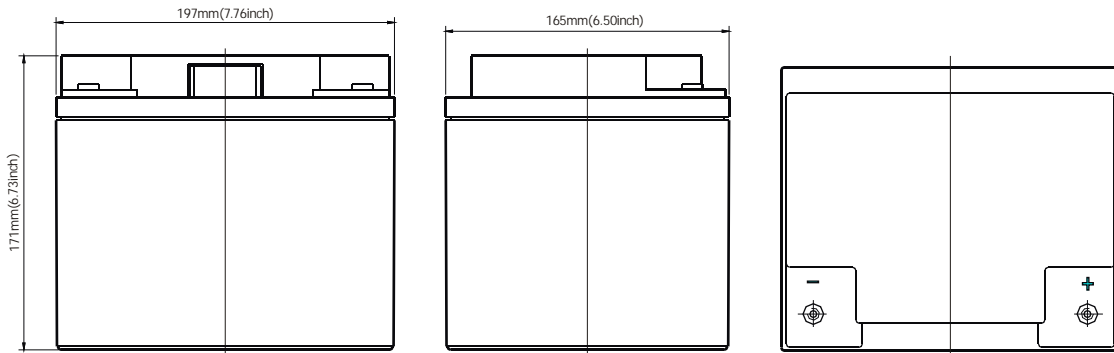
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.



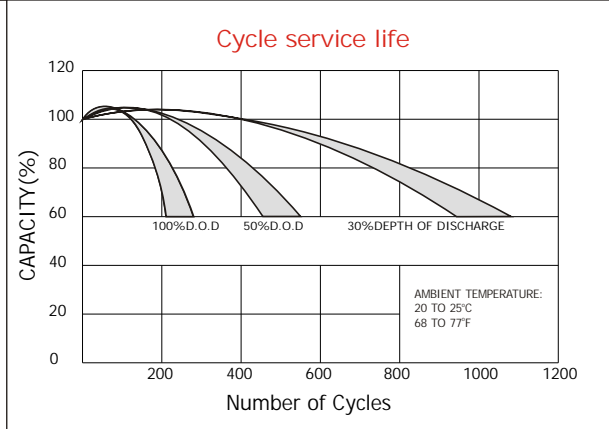
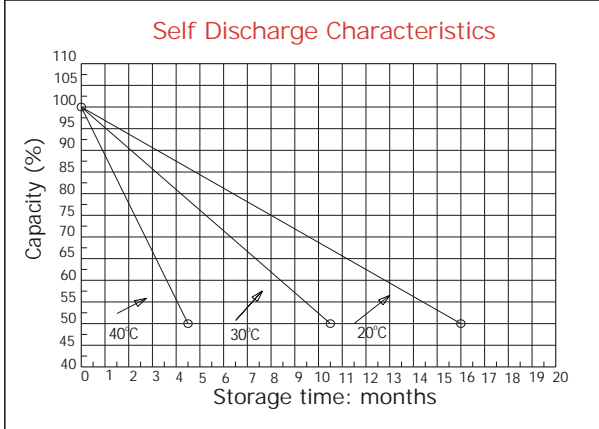
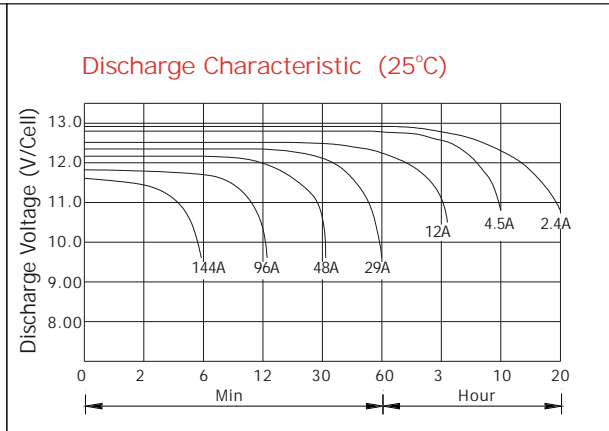
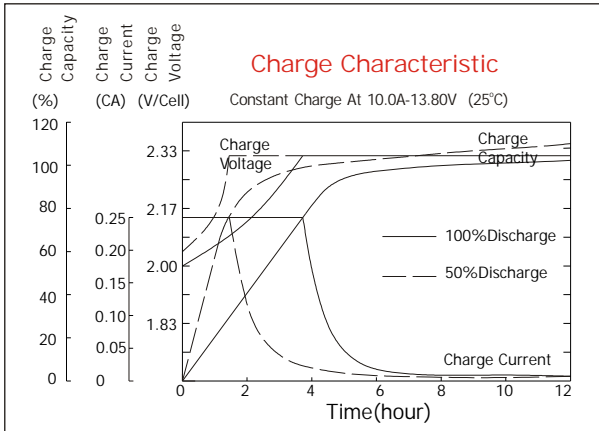
**Standard Terminal Dimensions**  
(Optional terminal please check terminal information page)

### Construction

- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy Resin
- Safety valve .....EPDR
- Terminal .....Copper
- Separator .....Fiber glass
- Electrolyte .....Sulfuric acid



Battery Model	GT12-48HR (160W to 1.67V, 15min)			
Designed Floating Life	8 Years			
Capacity(25°C)	20HR(2.4A,1.75V)	10HR(4.5A,1.75V)	5HR(8.2A,1.75V)	1HR(29A,1.75V)
	48Ah	45Ah	41Ah	29Ah
Dimensions	Length	Width	Height	Total Height
	197mm(7.76inch)	165mm(6.50inch)	170mm(6.69inch)	170mm(6.69inch)
Approx. Weight	15Kg (33.07 lbs)			
Internal Resistance	Full charged at 25°C: 0.009 Ohm			
Self Discharge	3% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.4-15V(-30mV/ °C), max. Current: 12A		13.6-13.8V(-20mV/ °C)	



### Constant current discharge ratings-amperes at 25°C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	189	118	88.7	54.1	34.1	15.0	9.15	4.67	2.69
1.67V	177	112	85.4	51.8	33.7	14.4	8.96	4.63	2.60
1.70V	163	108	83.4	47.1	32.6	13.4	8.77	4.61	2.56
1.75V	159	104	80.7	44.7	31.1	13.0	8.58	4.59	2.49
1.80V	143	99.5	73.3	41.4	29.1	12.5	8.06	4.50	2.42
1.85V	126	94.8	65.9	38.1	27.1	12.0	7.55	4.44	2.36

### Constant power discharge ratings-watts at 25°C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	332	212	162	97.5	61.6	26.6	15.5	9.60	5.38
1.67V	320	207	160	95.5	61.2	25.7	15.4	9.54	5.18
1.70V	301	205	159	89.4	60.0	24.6	15.2	9.48	5.12
1.75V	303	204	157	86.7	59.0	24.0	15.1	9.36	4.99
1.80V	278	201	146	82.7	55.6	23.3	14.6	9.24	4.86
1.85V	252	191	132	77.4	52.3	22.6	14.1	9.12	4.67

