powerBOX BATTERIES

12V60AH SERIES

www.powerboxups.com

(12V60AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	60.0AH	
Dimensions	Length	260±3mm (10.2 inches)
	Width	168±2mm (6.61 inches)
	Container Height	208±3mm (8.19 inches)
	Total Height (with Terminal)	214±3mm (8.43 inches)
Approx Weight	Approx 18.4 kg (40.5lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	62.4 AH/3.12A	(20hr ,1.80V/cell,25°C/77°F)
	60.0 AH/6.00A	(10hr,1.80V/cell,25°C/77°F)
	51.5 AH/10.3A	(5hr,1.75V/cell,25°C/77°F)
	46.8 AH/15.6A	(3hr,1.75V/cell,25°C/77°F)
	36.6 AH/36.6A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	720A (5s)	
Internal Resistance	Approx 7.4mΩ	
Operating Temp.Range	Discharge : -15～50°C (5～122°F)	
	Charge : 0～40°C (32～104°F)	
	Storage : -15～40°C (5～104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 18.0A.Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V 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	Series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Aircraft signal
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply
- Auto control system

VdS · Intertek ETL SEMKO · MH26866 · CEC ISO14001 · ISO9001 · CE EMC tested

Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	102.7	80.7	68.7	57.4	45.6	34.5	28.3	18.0	14.2	11.6	9.38	8.17	6.63	5.66	3.09
1.80V/cell	137.8	103.2	83.0	67.9	53.9	40.2	31.7	19.7	15.3	12.4	10.1	8.76	7.03	6.00	3.12
1.75V/cell	155.4	113.4	90.6	73.0	55.9	41.7	33.2	20.4	15.6	12.7	10.3	9.00	7.15	6.06	3.15
1.70V/cell	171.1	123.5	96.7	76.7	58.2	43.4	34.2	21.2	16.1	13.0	10.6	9.19	7.25	6.12	3.21
1.65V/cell	188.7	133.3	102.9	81.5	61.4	44.4	35.3	21.8	16.7	13.5	10.9	9.39	7.37	6.25	3.25
1.60V/cell	208.2	144.8	110.0	86.9	64.8	46.3	36.6	22.5	17.2	13.9	11.2	9.59	7.44	6.31	3.27

Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	187.8	149.1	128.1	108.2	87.0	66.4	54.6	35.0	27.8	22.7	18.4	16.0	13.1	11.2	6.12
1.80V/cell	249.3	188.3	152.7	126.1	101.1	76.6	60.8	37.9	29.7	24.2	19.7	17.1	13.8	11.9	6.17
1.75V/cell	275.2	203.6	164.8	134.3	104.1	78.8	63.3	39.2	30.1	24.6	20.1	17.6	14.0	12.0	6.22
1.70V/cell	294.6	216.9	173.5	140.1	107.7	81.6	65.1	40.7	30.9	25.2	20.6	17.9	14.2	12.1	6.34
1.65V/cell	320.2	231.9	183.0	147.7	112.7	82.9	66.8	41.6	32.1	26.0	21.1	18.2	14.4	12.3	6.41
1.60V/cell	345.1	246.0	192.5	155.7	118.2	85.9	68.8	42.7	32.9	26.7	21.7	18.6	14.5	12.4	6.44

Specifications subject to change without notice.

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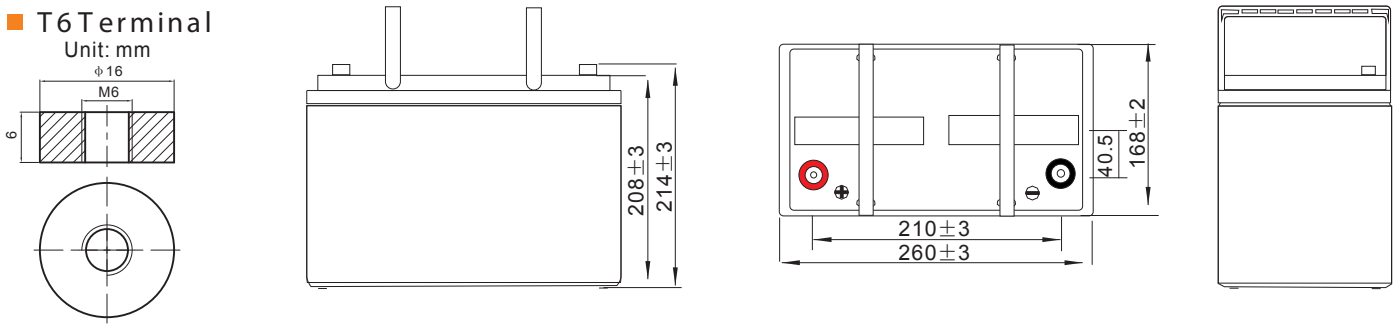
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Dimensions

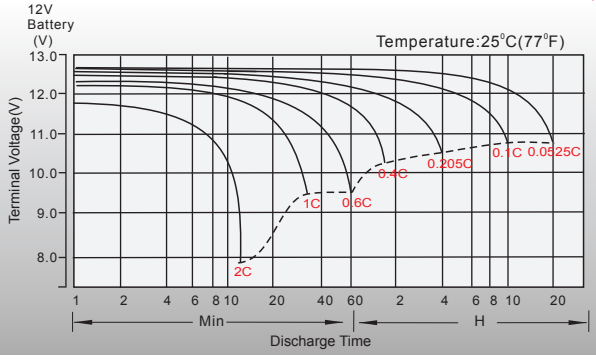
Ambient teperature:25±5°C

■ T6 Terminal

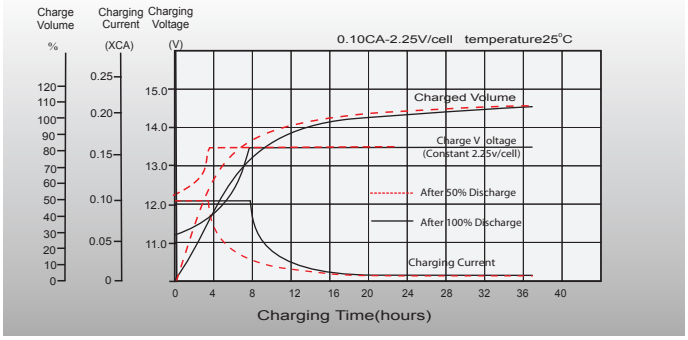
Unit: mm



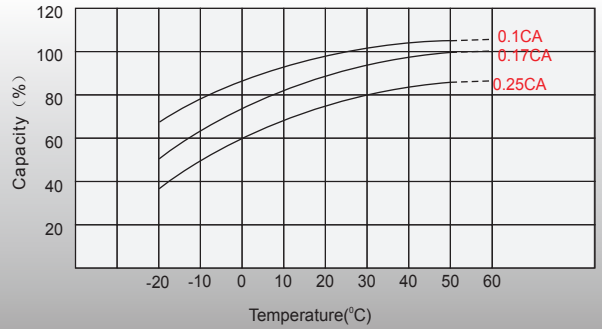
Discharge Characteristics



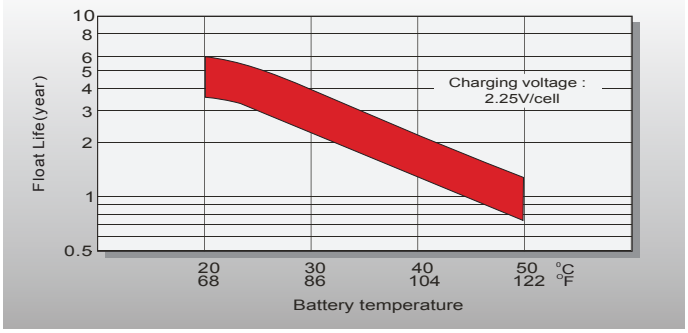
Float Charging Characteristics



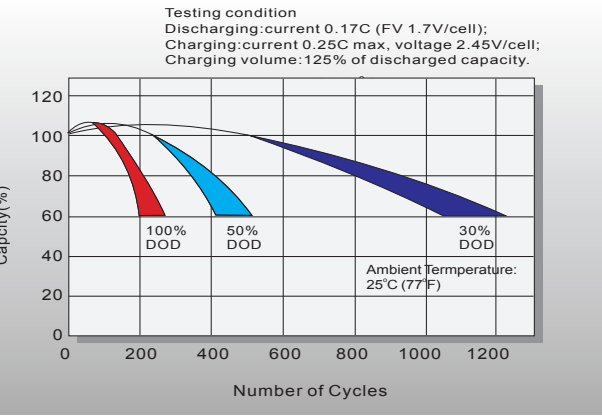
Temperature Effects in Relation to Battery Capacity



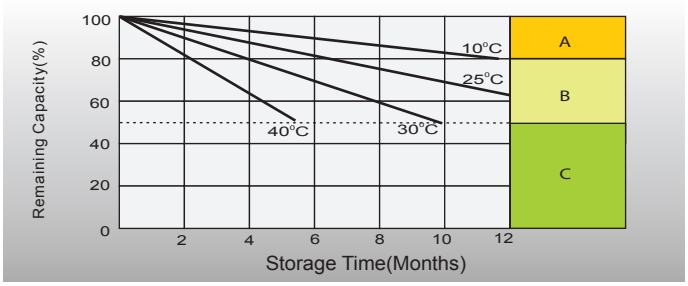
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A — No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B — Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C — Supplementary charge may often fail to recover the capacity .
The battery should never be left standing till this is reached.