



12V

48W

SLA

UPS  
AGM

## 12SB45WHR

Rechargeable AGM Sealed Lead Acid Battery

### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Power		
10 min rate	48W/cell to 1.60V/cell	
15 min rate	36W/cell to 1.60V/cell	
Nominal Capacity		
20 hour rate	(0.451A to 10.50V)	9Ah
10 hour rate	(0.855A to 10.50V)	8.55Ah
5 hour rate	(1.530A to 10.20V)	7.65Ah
1C	(9A to 9.60V)	5.7Ah
3C	(27A to 9.60V)	3.6Ah
Weight	Approx. 2.7kg	
Internal Resistance (at 1KHz)	Approx. 14mΩ	
Maximum Discharge Current (5 secs)	135A	

#### Charge Methods at 25°C

##### Standby Use

Float Charging Voltage 13.5V to 13.8V  
Coefficient -3.0mV/°C/Cell

Maximum Charging Current 2.7A

#### Operating Temperature Range

Charge -15°C to 40°C  
Discharge -15°C to 50°C  
Storage -15°C to 40°C

#### Charge Retention (Shelf Life) at 20°C

1 month 92%  
3 months 90%  
6 months 80%

Case Material ABS UL94 HB

Termination F2 (Faston Tab 250)

Design Life 3-5 years

Classified as a non-spillable battery.  
Approved for transportation by:  
• Air (IATA/ICAO provision A67)  
• Road  
• Sea (per IMDG Special Provision 238)

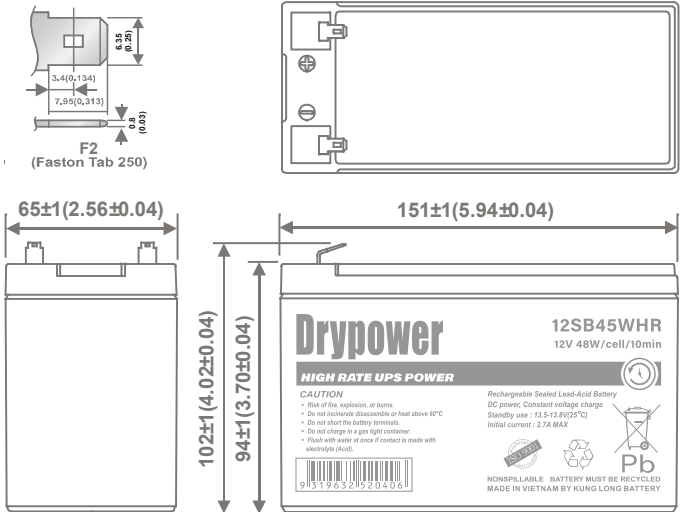


Barcode

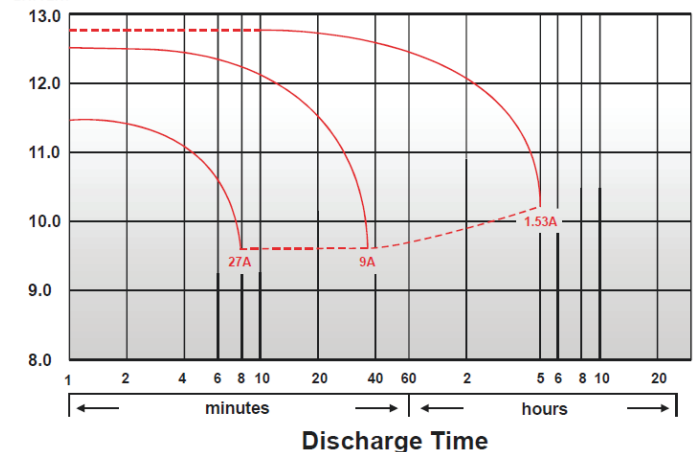


### DIMENSIONS

mm (inch)

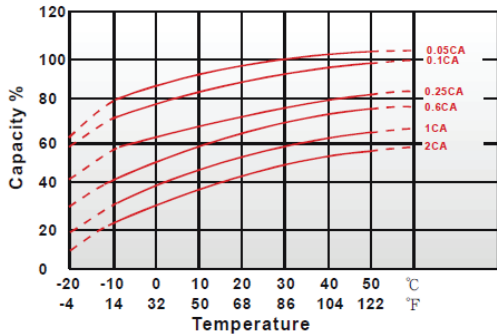


### (v) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)

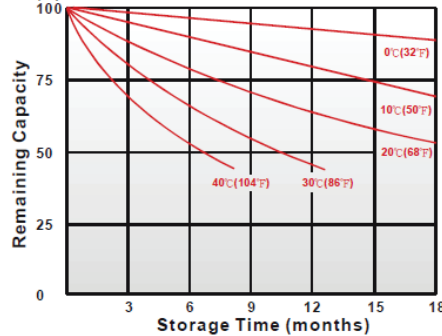


### CHARACTERISTICS CHARTS

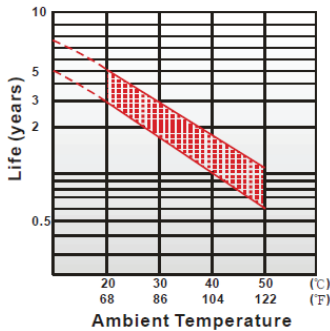
Effect of Temperature on Capacity 25°C (77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



### FEATURES & BENEFITS

- ◆ Industry leading 99.99% pure lead content for superior service life and dependable performance.
- ◆ Specially formulated solder paste to ensure reliable power delivery.
- ◆ Maintenance free technology and non-spillable design.
- ◆ Special grid frame alloy design with outstanding anti-corrosion performance.
- ◆ Higher percentage of tin content compared with the industry standard. Tin extends battery standby life by minimising sulphation (corrosion) especially at higher temperatures.
- ◆ Manufactured by Kung Long Battery (KLB) at facilities in Taiwan and Vietnam. KLB is a leading manufacturer and complies with relevant international quality standards including ISO9001, CE ETL9000, UL1989, OHSAS18001 and ISO17025. KLB supports Green Sustainable supply chain practices.



### PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C (77°F)								
End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	57.1	60.2	64.7	67.8	69.8	71.2	74.7
10	min	36.5	39.1	42	44	45.2	46.1	48.3
15	min	30.1	31.2	32.3	33.4	34	34.7	35.9
30	min	15.8	16.2	17	17.7	17.8	18	19.1
60	min	9.97	10.4	10.7	11	11.1	11.3	11.5
120	min	5.4	5.56	5.69	5.82	5.87	5.9	5.95
180	min	4.2	4.35	4.49	4.62	4.67	4.75	4.85
240	min	3.4	3.53	3.63	3.73	3.78	3.85	3.92
300	min	2.89	2.99	3.05	3.1	3.12	3.15	3.18
600	min	1.62	1.68	1.71	1.75	1.77	1.78	1.8
1200	min	0.853	0.882	0.902	0.907	0.91	0.913	0.918

Discharge Rates in Amperes to Various End Voltages at 25°C (77°F)								
End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	30.4	32.6	35	36.7	37.4	38.5	40.3
10	min	19.1	20.4	21.9	22.9	23.4	24.1	25.2
15	min	14.3	14.9	15.8	16.5	16.8	17.3	18
30	min	8.09	8.45	8.93	9.35	9.54	9.77	10.2
60	min	5.17	5.29	5.37	5.45	5.48	5.52	5.57
120	min	2.63	2.72	2.78	2.84	2.86	2.89	2.93
180	min	2.12	2.18	2.23	2.27	2.29	2.31	2.34
240	min	1.69	1.74	1.77	1.8	1.81	1.82	1.83
300	min	1.46	1.51	1.53	1.55	1.56	1.57	1.58
600	min	0.827	0.841	0.855	0.866	0.871	0.877	0.884
1200	min	0.427	0.442	0.451	0.456	0.459	0.462	0.466

All data on the spec. sheet is an average value:

The tolerance range : X < 6min (+15%~-15%), 6min ≤ X < 10min (+12%~-12%), 10min ≤ X < 60min (+8%~-8%), X ≥ 60min (+5%~-5%)

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Performance may vary depending on application. All specifications are correct at time of creation. All specifications and operation conditions contained in this datasheet are subject to change or improvement without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.