



2V

105Ah

SLA

AGM

## 2SB110HP-FR

Rechargeable AGM Sealed Lead Acid Battery

### SPECIFICATIONS

Nominal Voltage	2V
Nominal Capacity	
20 hour rate (5.25A to 1.75V)	105Ah
10 hour rate (10.0A to 1.80V)	100Ah
5 hour rate (17.0A to 1.70V)	85Ah
1 hour rate (60A to 1.60V)	60Ah
1C (100A to 1.60V)	50Ah
Weight	Approx. 7.5kg
Internal Resistance (at 1KHz)	Approx. 1.4mΩ
Maximum Discharge Current (5 secs)	600A
Charge Methods at 25°C	
Cycle Use	
Charging Voltage	2.4V to 2.5V
Coefficient -5.0mV/°C/Cell	
Maximum Charging Current	31.5A
Standby Use	
Float Charging Voltage	2.25V to 2.3V
Coefficient -3.0mV/°C/Cell	
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	98%
3 months	94%
6 months	85%
Case Material	UL94 V-0 Flame Retardant
Termination	F18 (M8 Bolt)

#### Description of Torque Value of Hardware for the Terminals

Recommended Torque Value	M8: 12 N-m (122kgf-cm)
Max. Allowable Torque Value	M8: 15 N-m (153kgf-cm)

Design Life	12-15 Years (at 20°C)
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Classified as a non-spillable battery.

Approved for transportation by:

- Air (IATA/ICAO provision A67)
- Road
- Sea (per IMDG Special Provision 238)



Barcode

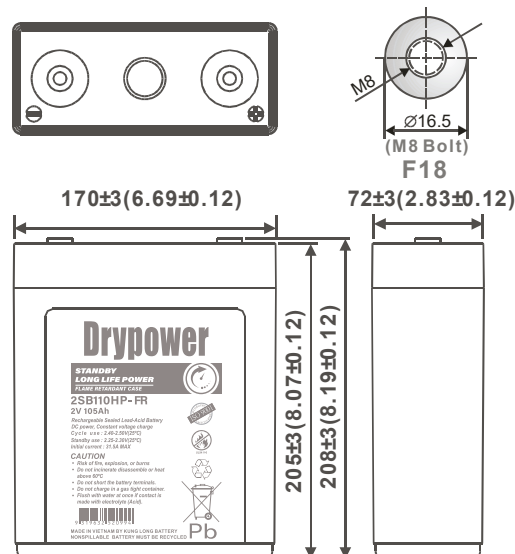


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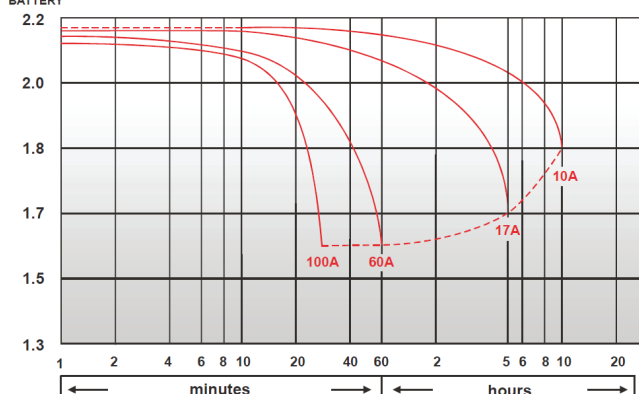
### DIMENSIONS

mm (inch)



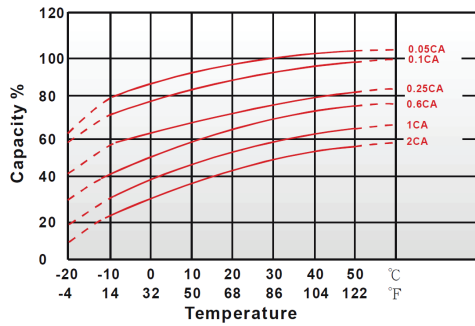
(V)  
FOR 2V  
BATTERY

#### Discharge Time VS. Discharge Current (25°C)

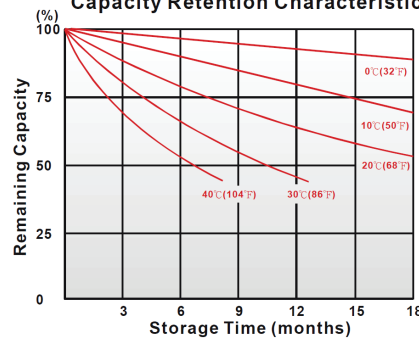


### CHARACTERISTICS CHARTS

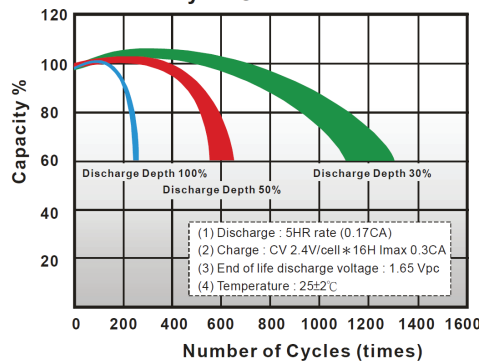
Effect of Temperature on Capacity 25°C (77°F)



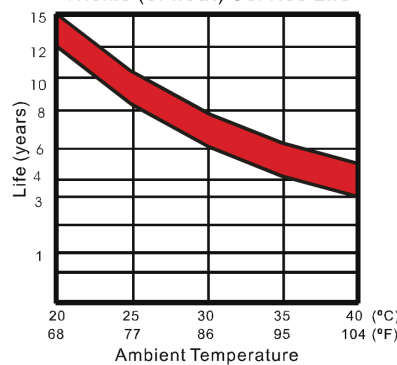
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



### FEATURES & BENEFITS

- ◆ Industry leading 99.99% pure lead content for superior service life and dependable performance.
- ◆ Long service life to reduce maintenance and logistical costs across telecom, utilities and off-grid applications.
- ◆ Minimises sulphation with a thicker plate design and higher percentage of tin content to maximise battery standby life.
- ◆ High rate discharge capable to ensure reliable performance.
- ◆ Maintenance free technology and non-spillable design.
- ◆ 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	1.65V	1.60V
Time							
20	min	155	177	196	211	223	232
30	min	143	163	175	185	192	198
60	min	101	108	113	118	121	124
120	min	59.1	62.8	66	69	71.6	74.1
180	min	42.4	45.8	48.5	50.9	55.2	57.2
240	min	37.1	39.8	42.2	44.2	45.6	46.8
300	min	32.8	34.7	36.3	38	39.2	40.1
360	min	30.5	31.7	32.7	33.5	34.3	35.1
480	min	23.9	24.9	25.7	26.5	27.2	27.8
600	min	20.1	20.8	21.4	22.1	22.6	23
1200	min	10	10.6	11.1	11.7	12.1	12.3

Discharge Rates in Amperes to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.65V	1.60V
Time							
20	min	81.9	94.5	105	114	122	127
30	min	76.8	86.5	92.3	97.4	102	105
60	min	46.8	52.7	56.2	58.9	61.1	63
120	min	28.1	31.2	33.4	35.3	36.6	37.7
180	min	22.9	24.2	25.3	26.2	27.1	27.9
240	min	18.1	19.1	20	20.8	21.5	22.1
300	min	15.6	16.4	17.1	17.7	18.3	18.8
360	min	13.60	14.3	14.9	15.5	16	16.4
480	min	11.1	11.6	12	12.3	12.7	13
600	min	9.64	10	10.3	10.5	10.7	10.9
1200	min	4.9	5.13	5.33	5.51	5.64	5.73

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.