

Drypower

**EXTREME HIGH RATE
LONG LIFE for UPS**



12V

820W

SLA

UPS
AGM

12SB820WHR-FR

Rechargeable AGM Sealed Lead Acid Battery

SPECIFICATIONS

Nominal Voltage 12V

Nominal Power

15 min rate

820W/cell to 1.67V/cell

Nominal Capacity

20 hour rate (11.5A to 10.50V)

230Ah

8 hour rate (24.2A to 10.50V)

193.6Ah

5 hour rate (37.4A to 10.20V)

187Ah

Weight

Approx. 66.4kg

Internal Resistance (at 1KHz)

Approx. 2.2mΩ

Maximum Discharge Current (5 secs)

1840A

Short Circuit Current

4040A

Charge Methods at 25°C

Maximum Charging Current

69A

Boost Charging Voltage

14.1V to 14.4V

Boost Charge Time

8-9 hrs

Float Charging Voltage

Coefficient -3.0mV/°C/Cell

13.5V to 13.65V

Operating Temperature Range

Charge

-15°C to 50°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

96%

6 months

94%

Case Material

UL94 V-0 Flame Retardant

Termination

F18 (M8 Bolt)

Torque Value of Terminal Hardware

Recommended Torque Value

M8: 12 N-m (122kgf-cm)

Max. Allowable Torque Value

M8: 20 N-m (204kgf-cm)

Design Life

10-12 years

Classified as a non-spillable battery.

Approved for transportation by:

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

Barcode

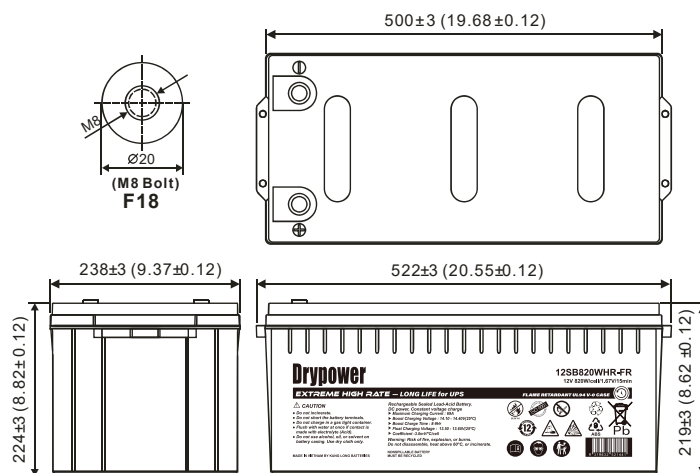


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DIMENSIONS

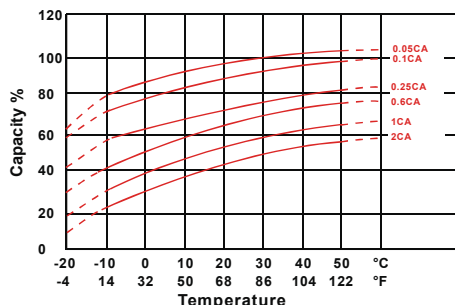
mm (inch)



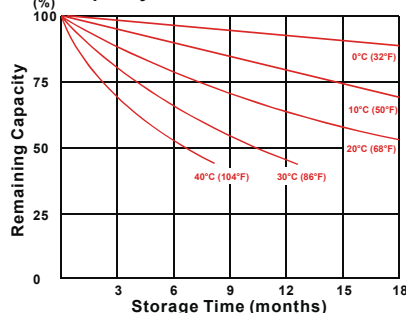
* If charging above 40°C, always use temperature-compensated charging (refer charge methods above). High temperature use accelerates ageing; as a general guide, service life halves for every 10°C sustained rise above 25°C. Consult the engineers at MI for more information if required.

CHARACTERISTICS CHARTS

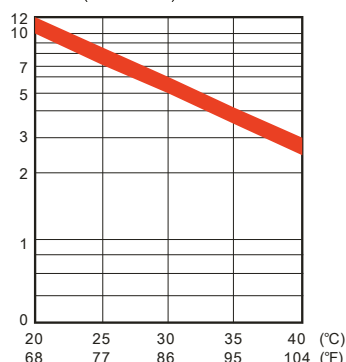
Effect of Temperature on Capacity 25°C (77°F)



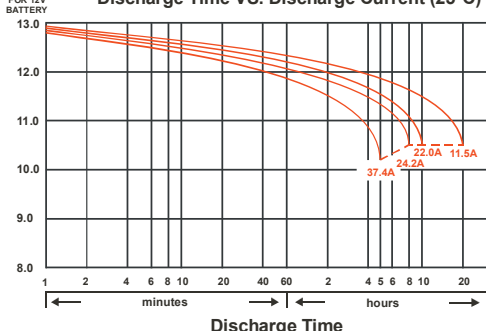
Capacity Retention Characteristic



Trickle (or float) Service Life



Discharge Time VS. Discharge Current (25°C)



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	1.75V	1.70V	1.67V	1.60V
Time						
5	min	1024	1083	1142	1200	1259
10	min	829	874	919	964	1009
15	min	678	750	778	818	825
20	min	549	574	599	624	649
25	min	482	504	526	548	570
30	min	449	464	479	493	508
45	min	334	344	354	364	374
60	min	261	269	276	284	291

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

End Voltage		1.85V	1.75V	1.70V	1.67V	1.60V
Time						
5	min	573	607	642	676	711
10	min	462	487	513	538	564
15	min	379	388	407	426	445
20	min	304.00	320	337	353	369
25	min	266	280	295	310	323
30	min	241	253	265	276	288
45	min	175	184	193	201	210
60	min	139	145	152	158	164

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%)