Sunshine Solar Ltd
Unit 30 Ashwellthorpe Ind Estate
Ashwellthorpe
Norfolk
NR16 1ER
01508 488188

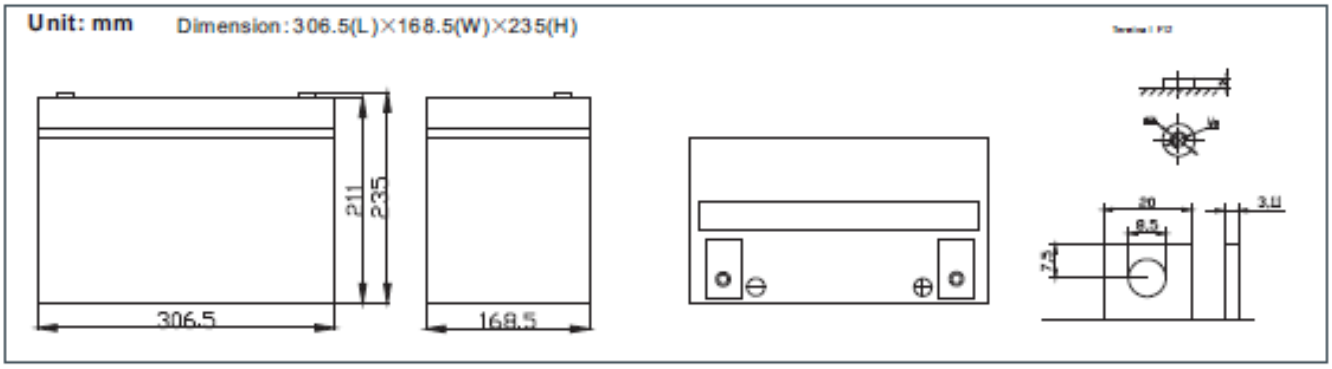
Technical Data: LP110-12

The LP110-12 is a general purpose battery with 10 years floating design life, meeting IEC, JIS, BS and Eurobat standards. With heavy duty, grid thickness plates, special additives, this series of batteries have a long life and reliable standby service life.

Specification:

Cells Per unit	6
Voltage per unit	12
Capacity	110Ah@20hr rate to 1.75V per cell @ 25ºC
Weight	Approx. 28.5 Kg
Max. Discharge Current	900A (5Sec)
Internal Resistance	Approx 5.2mΩ
Operating Temperature range	Discharge: -20ºC ~ 60ºC Charge: 0ºC ~ 50ºC Storage: -20ºC ~ 60ºC
Normal Operating Temp. Range	25ºC ± 5ºC
Float Charging Voltage	13.6 to 13.8VDC/ unit average at 25ºC
Recomm. Max Charging Current	27A
Equalization and Cycle Service	14.6 to 14.8VDC/ unit average at 25ºC
Self Discharge	Can be stored for more than 6 months at 25ºC. Self-discharge ratio less than 3% per month at 25ºC. Please charge battery before using.
Terminal	Terminal F12/F15
Container Material	A.B.S.(UL94-HB) Flammability resistance of U94-V1.

Dimensions



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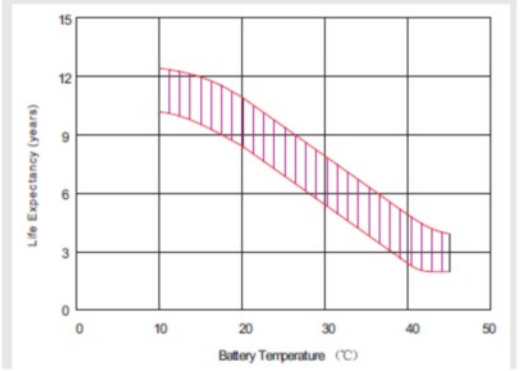
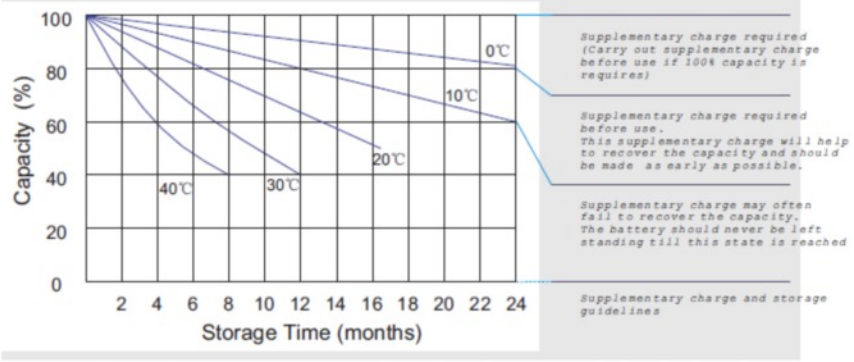
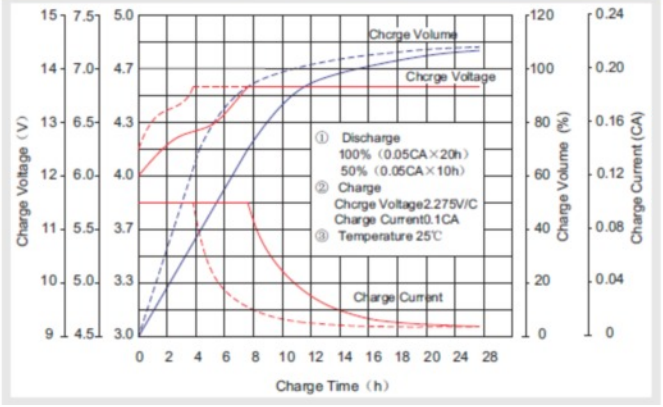
Effect of temperature on long term float life



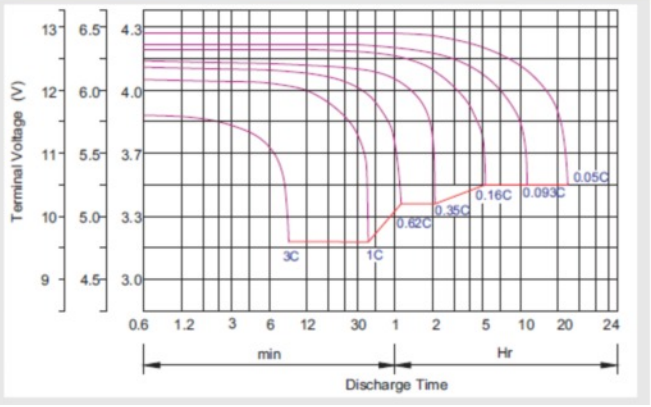
Storage characteristic



Charge characteristic Curve for standby use



Discharge characteristic Curve



Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	314.50	231.55	168.48	103.50	58.500	32.678	23.490	19.440	15.912	11.180	9.4527	4.9990
10.0V	305.41	220.32	165.02	101.79	58.230	32.432	23.400	19.350	15.818	11.089	9.3618	4.9081
10.2V	296.35	212.54	162.43	100.89	57.690	32.187	23.220	19.260	15.725	10.998	9.2709	4.8172
10.5V	266.11	196.13	154.66	98.370	57.150	31.941	23.130	19.080	15.538	10.907	9.1800	4.7263
10.8V	240.19	178.85	142.56	94.050	55.800	31.368	22.500	18.630	15.257	10.725	9.0891	4.6354
11.1V	209.09	159.84	127.87	88.110	53.010	29.975	21.510	17.730	14.602	10.271	8.8164	4.3628

Constant Power Discharge Characteristics: W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3298.4	2462.3	1812.9	1109.6	669.06	375.92	271.08	224.64	184.20	129.73	106.29	56.143
10.0V	3210.2	2351.8	1775.3	1095.8	665.82	374.45	270.54	224.10	183.08	129.18	105.20	55.598
10.2V	3113.6	2273.5	1751.2	1082.9	660.96	371.01	268.92	223.02	182.52	128.09	104.65	55.053
10.5V	2803.8	2100.7	1669.8	1058.3	654.48	367.57	267.30	221.40	180.84	127.00	103.56	54.508
10.8V	2522.0	1907.4	1534.2	1010.1	638.28	362.16	260.82	215.46	178.03	124.28	102.47	53.963
11.1V	2177.0	1693.9	1370.0	946.49	604.80	345.45	247.86	205.20	169.04	119.92	99.204	51.782

Capacity Factors With Different Temperature

-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
46%	66%	76%	83%	90%	98%	100%	103%	107%	109%

Discharge Current VS. Discharger Voltage

Final Discharge Voltage V/Cell	1.75V	1.70V	1.60V
Discharge Curent (A)	(A) ≤0.2C	0.2C< (A) <1.0C	(A) ≥1.0C

Charge the batteries at least once every 6 months, if they are stored at 25°C