GP 12120

12V 12Ah

GP 12120 is a general purpose battery up to 5 years in standby service or more than 260 cycles at 100% discharge in cycle service. As with all CSB batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	12Ah @ 20hr-rate to 1.75V per cell @25 ℃(77℉)
Weight	Approx. 3.67 kg(8.09 lbs)
Maximum Discharge Current	150A/180A(5sec)
Internal Resistance	Approx. 16mΩ
Operating Temperature Range	Discharge: -15℃~50℃(5℉~122℉) Charge: -15 ℃~40℃(5℉~104℉) Storage: -15℃~40℃(5℉~104℉)
Nominal Operating Temperature Range	25℃±3℃(77℉±5℉)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25℃(77℉)
Recommended Maximum Charging Current Limit	3.6A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25℃(77℉)
Self Discharge	CSB Batteries can be stored for more than 6 months at 25℃(77℉). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	F1/F2-Faston Tab187/250
Container Material	ABS(UL 94-HB/File E50263)*Flammability resistance of (UL 94-V0/File E88637) can be available upon request.

MH14533(N)

TÜV CERT ISO9001 No :041005117

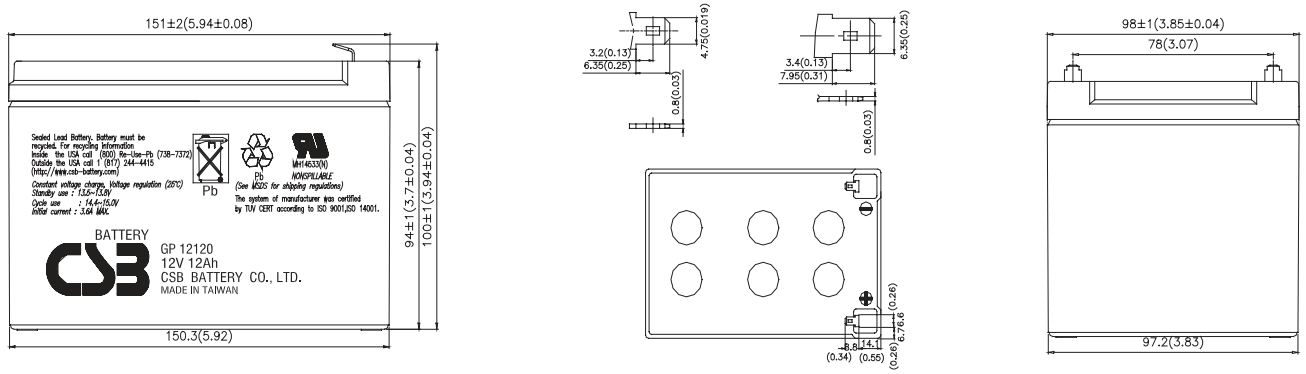
RWTUV ISO 14001 NO.UM 1-12-0045

VdS G 104097

CSB-manufactured batteries are UL-recognized components under UL924 and UL1989.
CSB is also certified by ISO 9001 and ISO 14001.

Dimensions

unit:(MM)



Constant Current Discharge Characteristics Unit:A (25℃,77℉)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	48.2	31.4	24.1	14.8	8.83	5.12	3.66	2.89	2.33	1.53	1.23	0.645
1.67V	44.6	30.0	23.1	14.6	8.66	5.03	3.64	2.88	2.32	1.52	1.22	0.624
1.70V	42.9	29.2	22.7	14.5	8.57	5.00	3.63	2.87	2.31	1.51	1.21	0.615
1.75V	39.9	28.0	22.0	14.3	8.45	4.92	3.61	2.86	2.30	1.50	1.20	0.600
1.80V	36.9	26.7	21.3	14.0	8.30	4.82	3.60	2.84	2.28	1.49	1.18	0.585
1.85V	33.9	25.3	20.6	13.8	8.16	4.80	3.58	2.82	2.27	1.48	1.17	0.570

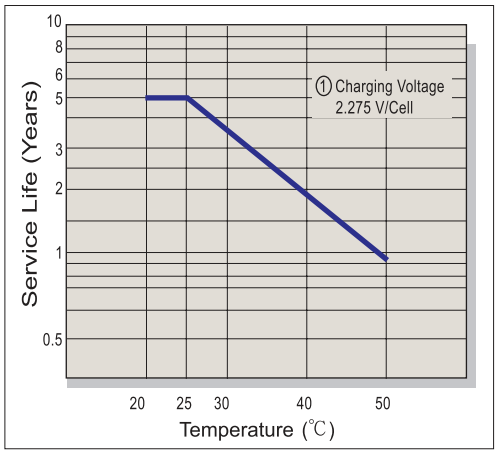
Constant Power Discharge Characteristics Unit:W (25℃,77℉)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	578	377	289	178	106	61.7	43.9	34.1	27.9	18.1	14.7	7.50
1.67V	533	358	279	175	104	61.6	43.8	34.0	27.8	18.0	14.6	7.30
1.70V	513	349	275	174	103	61.4	43.7	33.9	27.7	17.9	14.5	7.21
1.75V	479	335	266	172	102	61.2	43.5	33.8	27.5	17.8	14.3	7.02
1.80V	444	320	257	169	100	60.9	43.2	33.6	27.3	17.6	14.1	6.83
1.85V	407	304	247	166	98.0	60.6	43.0	33.4	27.1	17.4	13.9	6.64

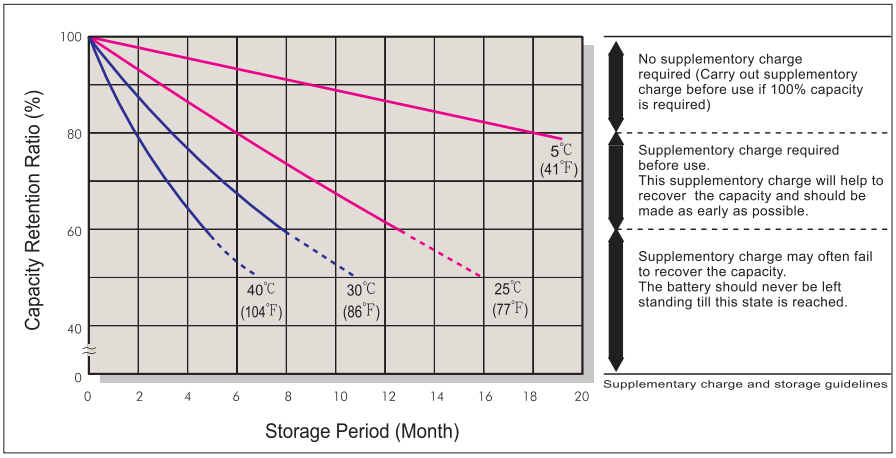
- All mentioned values are average values.

GP 12120 12V 12Ah

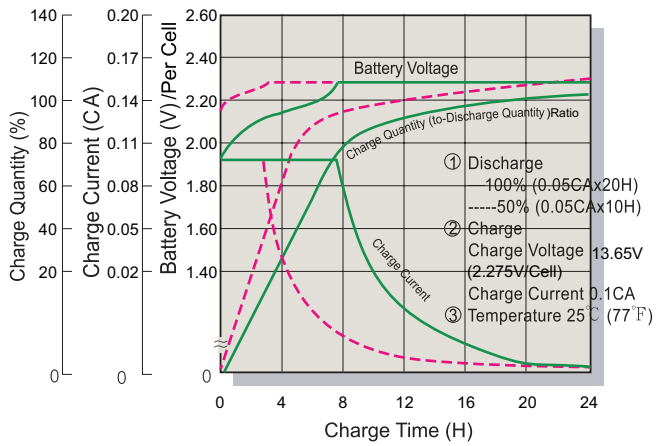
Trickle (or Float) Service Life



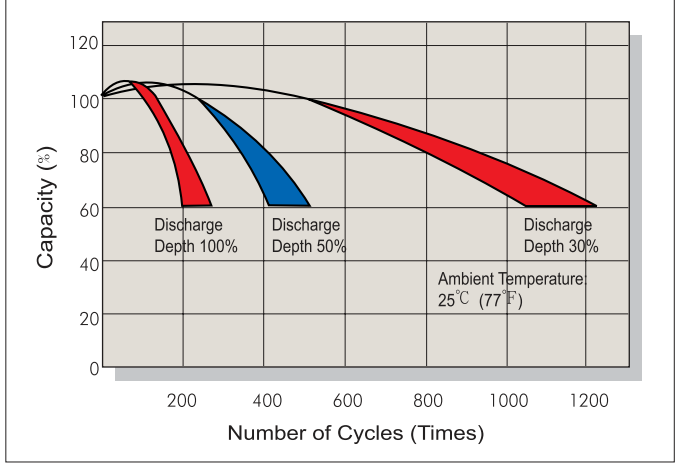
Capacity Retention Characteristic



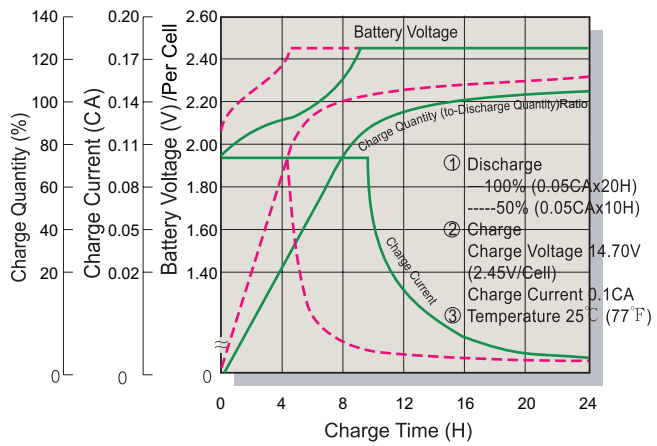
Battery Voltage and Charge Time for Standby Use



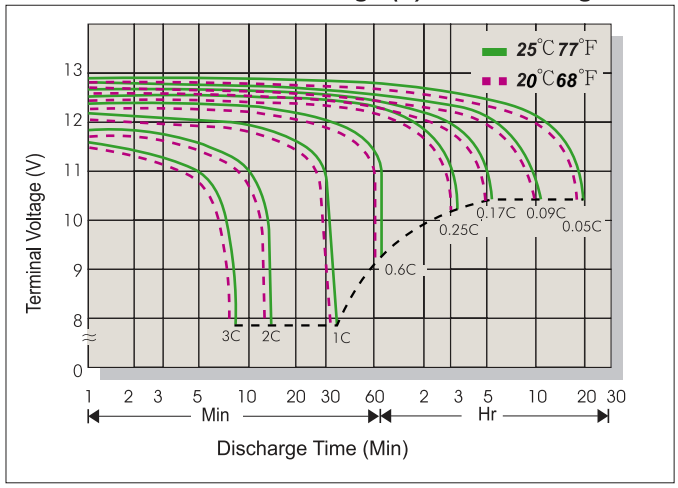
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25℃(77℉)	2.45	2.40~2.50	0.3C
Standby	25℃(77℉)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Sales Office

URL:WWW.CSB-BATTERY.COM

CSB BATTERY CO., LTD.
TAIWAN OFFICE
Tel: +886-2-2555-5600
Fax: +886-2-2555-3300
E-mail: service@csb-battery.com.tw

CSB BATTERY LOGISTICS (SHANGHAI) CO., LTD.
SHANGHAI OFFICE
Tel: +86-21-5046-1622, 5046-0833
Fax: +86-21-5064-3314

CSB BATTERY TECHNOLOGIES, INC
USA OFFICE
Tel: +1-817-244-7777/1-8003 CSBUSA(272872)
Fax: +1-817-244-4445
E-mail: csb@csb-battery.com

CSB BATTERY LOGISTICS (SHANGHAI) CO., LTD.
BEIJING OFFICE
Tel: +86-10-6597-8060, 6597-8070
Fax: +86-10-6597-8050
E-mail: chinasls@csb-battery.com

CSB BATTERY OF NETHERLANDS B.V
NETHERLANDS OFFICE
Tel: +31(0) 180 418 140
Fax: +31(0) 180 418 327
E-mail: eurosales@csb-battery.com

CSB BATTERY LOGISTICS (SHANGHAI) CO., LTD.
SHENZHEN OFFICE
Tel: +86-755-2694-2788/2606/2706
Fax: +86-755-2694-2748
E-mail: she@csb-battery.com.tw