

FEATURES

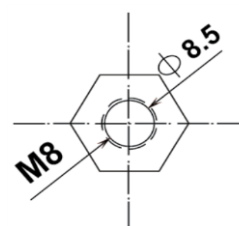
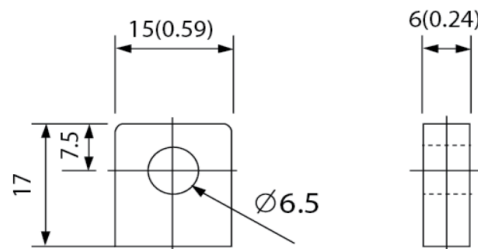
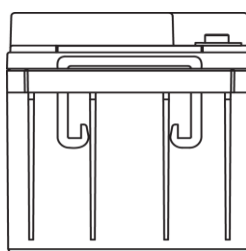
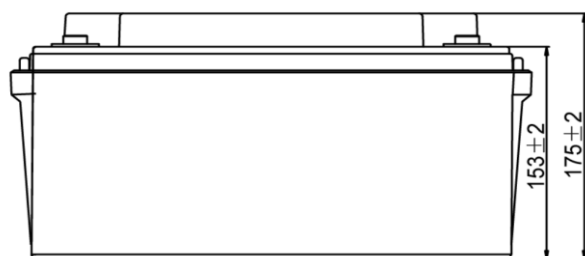
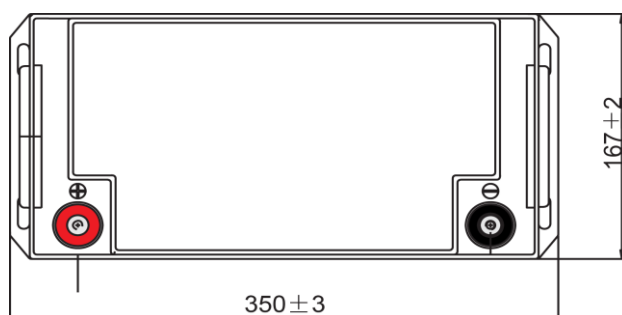
ES65-12 is a general purpose battery with 3~5 years service life under normal float charge at 25°C. LCB batteries are rechargeable Seal Lead highly efficient, leak proof and maintenance free.

SPECIFICATION

Cell per unit	6	Ambient temperature	
Nominal Voltage (V)	12	Charge	0°C (32°F) to 40°C (104°F)
Nominal Capacity (Ah)	65Ah @ 20hour rate F.V(1.75/Cell)	Discharge	-15°C (5°F) to 50°C (122°F)
Weight	Approx 20.5kg	Storage	-15°C (5°F) to 40°C (104°F)
Internal Resistance (1KHz)	8mΩ	Max charge Current	
Max Discharge Current (5s)	650A (5s)	Cycle use :	Max charge current : 19.5A
Battery Life :	Stand by :3~5 years	Charge voltage:	14.4V to 15.0V
Terminal Type	NB(F14)/IT(F8)	Stand by :	Charge voltage: 13.5V to 13.8V
Container Material	ABS(Option : 94-HB & 94V-0 flame retardant case)		



DIMENSIONS	Length	Width	Height	Total Height
Unit: mm	350±3	167±2	175±2	175±2
Unit: inch	13.78±0.12	6.57±0.08	6.89±0.08	6.89±0.08



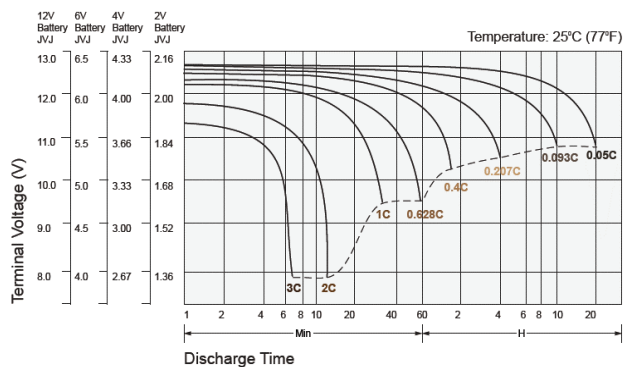
Constant current discharge characteristics Unit:A(25°C 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	2HR	5HR	8HR	10HR	20HR
1.60V	210.0	138.0	111.0	68.0	38.0	24.0	11.8	7.83	6.52	3.40
1.67V	193.0	130.0	105.0	67.0	37.0	23.6	11.6	7.73	6.48	3.40
1.70V	177.0	120.0	103.0	66.0	36.0	23.0	11.5	7.63	6.42	3.30
1.75V	160.0	118.0	98.0	64.5	34.0	22.2	11.4	7.51	6.40	3.28
1.80V	142.7	102.5	96.0	62.0	32.7	21.4	11.3	7.32	6.33	3.26

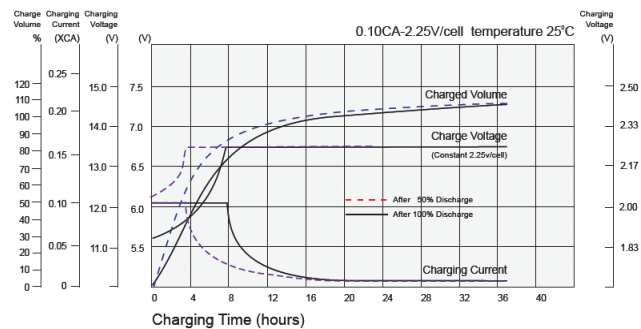
Constant power discharge characteristics Unit:W(25°C 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	2HR	5HR	8HR	10HR	20HR
1.60V	2088.0	1410.0	1146.0	708.0	423.0	251.4	136.2	93.0	75.79	39.88
1.67V	1968.0	1356.0	1116.0	696.0	414.6	247.2	135.9	91.0	75.79	39.88
1.70V	1830.0	1266.0	1074.0	681.0	406.2	242.4	135.4	90.8	75.64	39.80
1.75V	1708.8	1200.0	1020.0	655.0	391.8	236.0	134.6	88.0	75.24	39.60
1.80V	1548.6	1122.0	948.0	627.0	376.8	232.0	132.7	86.0	74.09	38.81

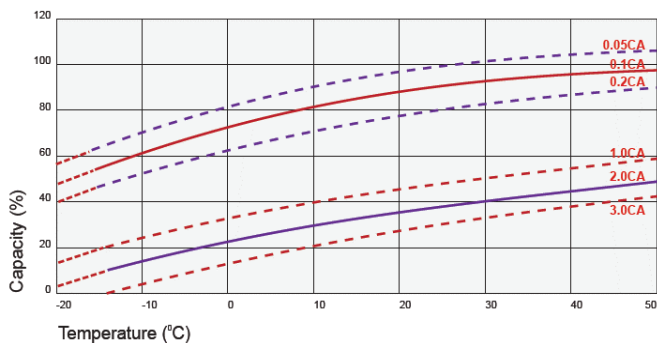
Battery Discharge Characteristics (25°C/77°F)



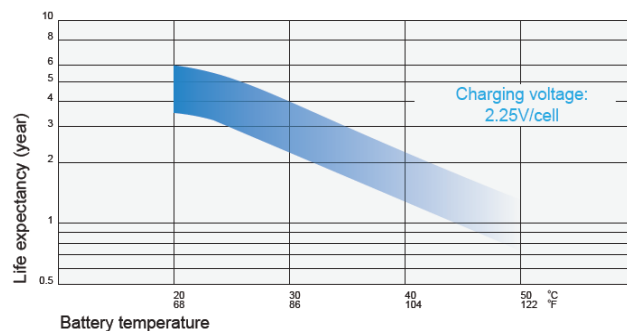
Battery Charge Characteristic for standby use



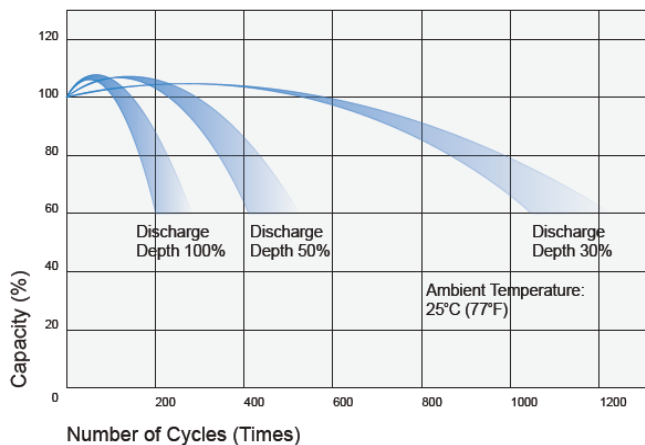
Temperature Effects in Relation to Battery Capacity



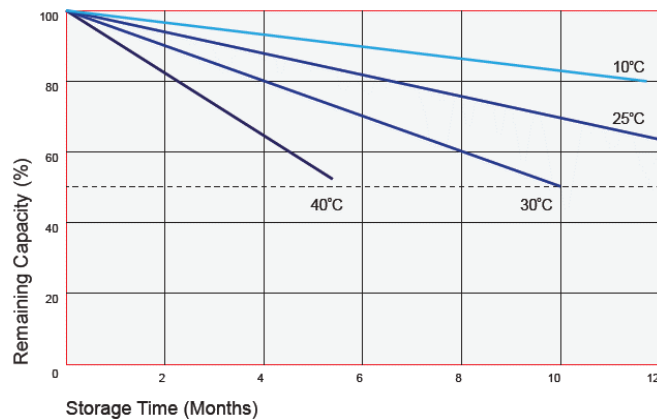
Temperature Effects on Long Term Float Life



Cycle Service Life



Self Discharge Characteristics



Charging Procedures

Application	Charge Voltage(V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.25C
Standby	25°C(77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75	1.70	1.65	1.60
Discharge Current (A)	0.2C~(A)	0.2C<(A) <0.5C	0.5C<(A) <1.0C	(A)>1.0C

Taiwan HQ: LONG CHANG BATTERY CO.,LTD

NO.336,Sec. 1, Yanco Rd. , Fenyuan Shiang,
Changhua County 502, Taiwan(R.O.C.)

TEL:+886-49-2510088

Web: www.lcb.tw

FAX:+886-49-2510099

E-mail: lcb@lcb.tw

Vietnam Factory: SHENG CHANG TECH. CO., LTD

Lot I 1A –CN- My Phuoc Industrial II, Ben Cat District, Binh
Duong Province, Vietnam

TEL: +84-2743553577

FAX: +84-2743553576