

### Advantages

- Very long life according to EUROBAT Classification
- More than 3000 cycles at 70% DOD
- Special negative active material formula, improve the charge acceptance ability, reduce the negative plate sulphation, more suitable for the partial state of charge (PSOC) application
- Modular design and installation, compact structure, saving the installation area and space, easy installation, convenient maintenance

### Application

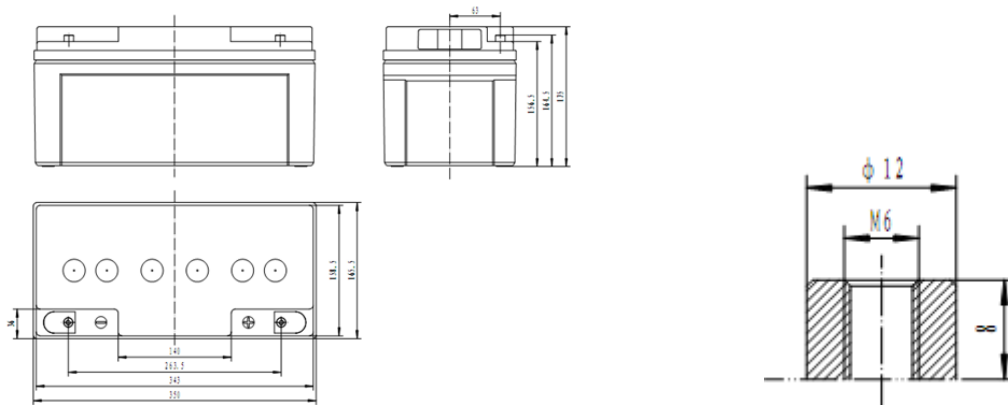
- Household energy storage system
- Solar and wind energy system
- Emergency system
- Other cycling systems

### Standards

- IEC 60896-21/22: 2004
- IEC61427-2014
- Eurobat guide
- Installation compliant with EN50272-2



### Drawing



### Specification

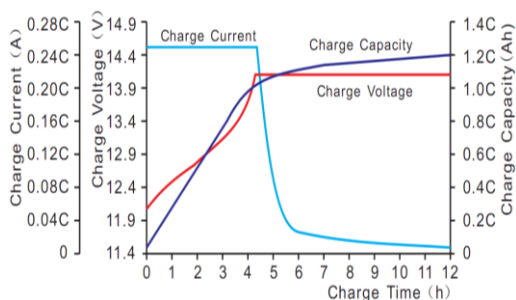
Battery Model	NLC12-50			
Design Life (Years, 25°C)	15			
Capacity(Ah, 25°C)	10HR(5.46A,1.80V)	5HR(10.6A,1.80V)	3HR(14.8A,1.80V)	100HR(0.627A,1.80V)
	54.6	53.0	44.4	62.7
Dimensions(mm)	Length	Width	Height	Total Height
	350	165.5	175	175
Approx. Weight (kg)	25.5			
Internal Resistance(mΩ)	4.7			
Short Circuit Current (A)	1500			
Self-Discharge(25°C)	≤1% per months			
Charge Voltage(V/cell, 25°C)	Cycle use		Float use	
	2.40(-4mV/°C), max charge current:20A		2.25(-4mV/°C)	

## Discharge Data

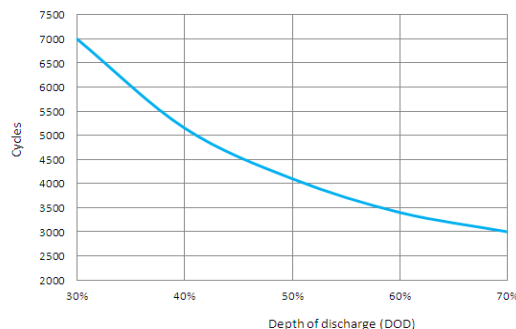
Constant current discharge data (25°C , A)											
End voltage(V/cell)	1h	2h	3h	5h	8h	10h	20h	50h	100h	120h	240h
1.70	30.3	21.8	15.8	11.2	7.53	5.78	3.14	1.26	0.651	0.561	0.297
1.75	29.7	21.3	15.4	11.0	7.34	5.71	3.09	1.24	0.639	0.555	0.295
1.80	28.9	20.6	14.8	10.6	7.00	5.46	2.96	1.19	0.627	0.545	0.291
1.85	27.9	19.7	14.0	10.0	6.50	5.16	2.80	1.14	0.601	0.528	0.281
1.90	26.0	18.2	12.9	9.11	5.94	4.57	2.55	1.04	0.563	0.491	0.258
1.95	23.5	16.2	11.2	7.72	5.16	3.92	2.04	0.83	0.452	0.402	0.215

Constant power discharge data (25°C , W/cell)											
End voltage (V/cell)	1h	2h	3h	5h	8h	10h	20h	50h	100h	120h	240h
1.70	54.7	39.4	28.5	20.3	14.0	10.7	5.82	2.37	1.26	1.10	0.587
1.75	54.0	38.9	28.1	20.0	13.8	10.6	5.76	2.34	1.24	1.09	0.583
1.80	53.1	38.1	27.5	19.6	13.5	10.4	5.66	2.29	1.22	1.07	0.574
1.85	51.9	37.0	26.8	19.1	12.9	10.0	5.48	2.23	1.17	1.04	0.556
1.90	50.0	35.2	25.0	17.8	12.0	8.98	5.02	2.04	1.11	0.969	0.511
1.95	45.6	31.6	21.9	15.1	10.5	7.96	4.16	1.68	0.926	0.826	0.449

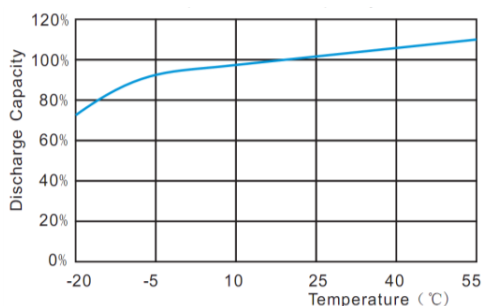
## Performance Curve:



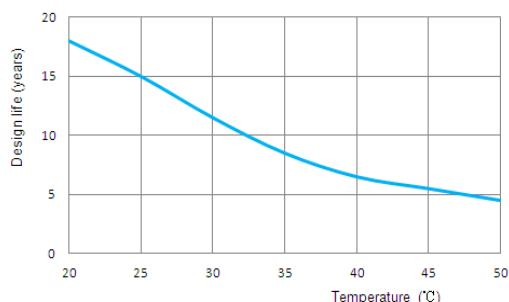
Charging characteristic



Cycle life vs. discharge depth



Temperature vs. capacity



Design life vs. temperature



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