

TECHNICAL DATA SHEET

DLC12-135EV

Applications



CYCLIC



STATIONARY



SOLAR



MARINE

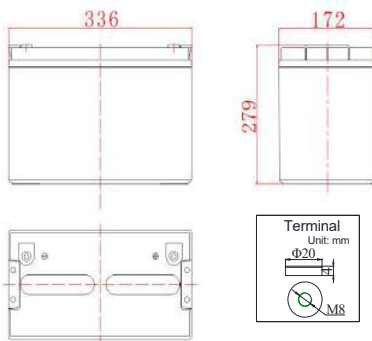
Application

- › Renewable Energy Storage
- › Solar/wind generating storage cyclic
- › Hybrid Energy Power Storage
- › New Energy Vehicle
- › Hybrid Electric Vehicle
- › Backup power supply
- › Other Standby, Cyclic Power Systems

Specification

Nominal Voltage	12V
Nominal Capacity	135Ah
Design life	12 years
Terminal	M8 or A Terminals
Approx. Weight	Approx 41.00 kg
Container Material	ABS
Rated Capacity	135Ah 10Hour Rate (13.5A to 10.8V)
	114Ah 3Hour Rate (38.0A to 10.5V)
	90Ah 1Hour Rate (90.0A to 10.5V)
Internal resistance	Full charged at 25°C: 4.5 Ohm
Max. Discharge Current	1350.0A(5S)
Operating Temperature	Discharge: -40 ~60°C (-40~ 140°F)
	Charge: -20 ~50°C (-4~ 122°F)
	Storage: -20 ~50°C (-4~ 122°F)
Charge current: Max.40.5A ; Recom.16~27A	
Float Charge voltage(-3mV/°C) :	
Charge Method (25 °C)	13.7-13.9V,recom.13.7V(Full floating system)
	Cycle charge:14.7-15.0V,recom.14.7V(-3mV/ °C)
3% of capacity declined per month at 20°C	

Unit: mm Dimension: 336(L)×172(W) ×279(H)×279(TH)



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Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5M	15M	30M	1H	2H	3H	5H	8H	10H
1.60V	485	260	158	92.6	53.1	39.4	25.9	17	14.1
1.65V	470	252	156	92.1	52.8	38.9	25.6	16.9	13.9
1.70V	451	247	153	91.4	52.4	38.4	25.3	16.7	13.8
1.75V	415	239	152	90	51.6	38	25.1	16.6	13.7
1.80V	372	223	145	87.8	50.7	37.7	24.4	16.4	13.5
1.85V	332	199	132	81.3	48.1	35.5	23.2	15.8	13.1

Constant Power Discharge (Watts) at 25 °C 77°F)

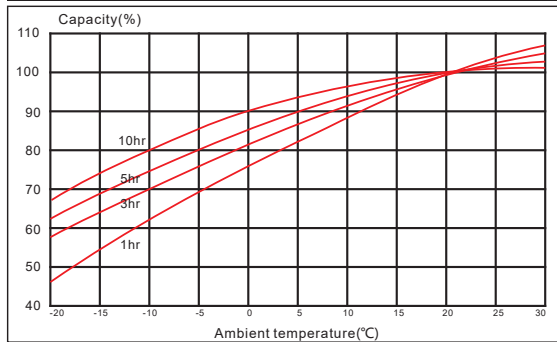
F.V/Time	5M	15M	30M	1H	2H	3H	5H	8H	10H
1.60V	813	459	287	175	100	74.9	49.1	33	27
1.65V	782	451	284	174	100	73.9	48.8	32.8	26.7
1.70V	778	445	284	174	100	73.9	48.8	32.8	26.7
1.75V	778	445	284	172	100	73.5	48.4	32.6	26.4
1.80V	666	418	276	170	99	72.8	47.6	32.1	25.9
1.85V	595	374	253	158	94.5	69.2	45.4	31	25.5

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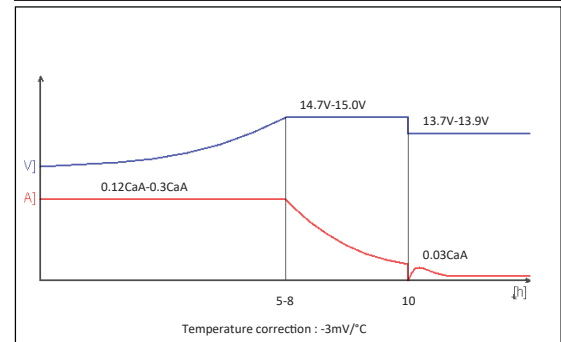
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Model Performance Diagrams

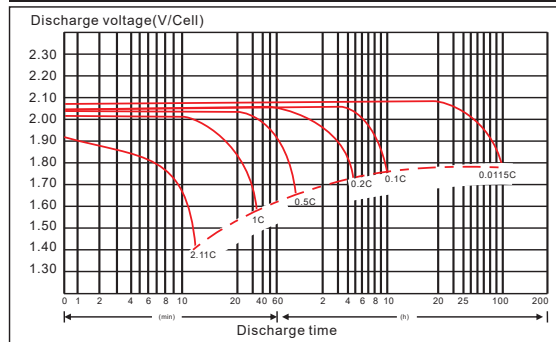
Curves of discharge capacity and ambient temperature



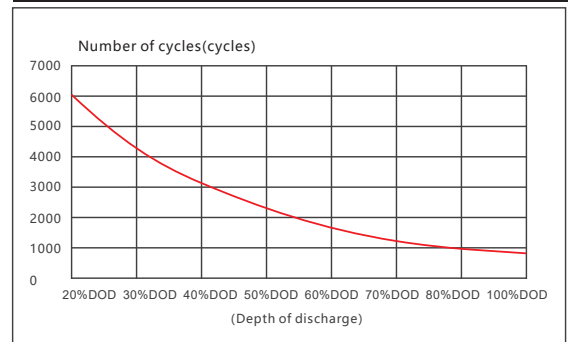
Curves of charging characteristics



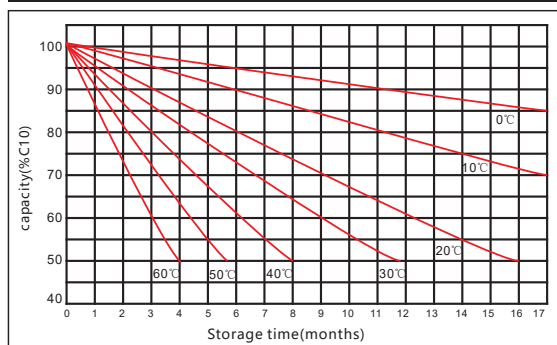
Discharge characteristics at different discharge rate(20°C)



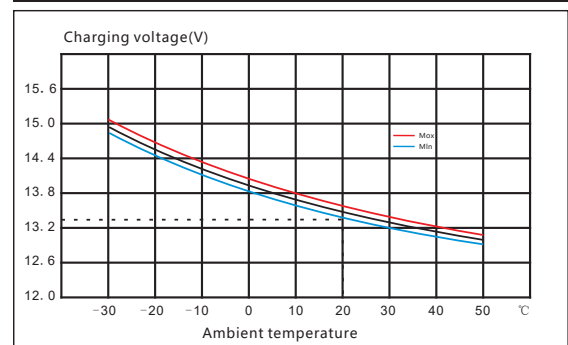
Curves of cycle life



Curves of self-discharge and storage time



Curves of float voltage and ambient temperature



Charging procedures

Application type	Charge Voltage(V)			Max charge current (A)
	Temp (°C)	Set point	Temperature compensation	
Cycle use	25	14.70	-3mV/°C/cell	0.3C
Float use	25	13.70	-3mV/°C/cell	

The relationship between discharge current and voltage

Discharge rate	1hr	3hr	8hr	10hr
End voltage (V)	10.5	10.8	10.8	10.8
Discharge current (A)	0.55C	0.25C	0.12C	0.10C

