

TECHNICAL DATA SHEET

DLC12-250EV

Applications



CYCLIC



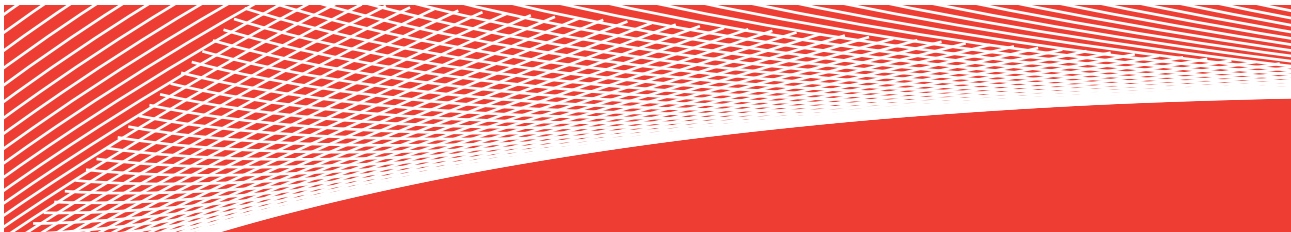
STATIONARY



SOLAR



MARINE



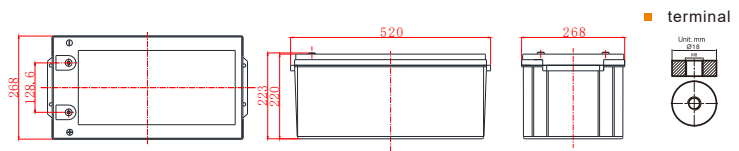
Application

- › 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	250AH
Design life	12 years
Terminal	M8
Approx. Weight	Approx 68.0kg (149.9lbs)
Container Material	ABS
Rated Capacity	250Ah 10Hour Rate (25.0A to 10.8V)
	201Ah 3Hour Rate (67A to 10.8V)
	157Ah 1Hour Rate (157A to 10.5V)
Internal resistance	Full charged at 25°C: 3.0 mOhms
Max. Discharge Current	2000A(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 Method (25 °C)	Max. charge Current: 75 A
	Cycle use: 14.7-15.0V(-3mV/°C)
	Float use: 13.7-13.9V(-3mV/°C)
Self discharge	3% of capacity declined per month at 20°C

Unit: mm Dimension: 520(L)×268(W) ×220(H)×223(TH)



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	603	425	362	288	240	166	148	87.6	63.3	48.3	42.1	35.5	28.8	24.4	13.2
1.80V/cell	677	476	406	316	254	174	153	92.1	67.0	51.8	44.5	37.5	30.0	25.0	13.4
1.75V/cell	754	522	435	333	267	182	157	93.9	67.5	53.1	45.6	38.3	30.3	25.3	13.5
1.70V/cell	820	530	449	349	272	188	159	95.3	68.0	54.4	46.0	39.0	30.5	25.5	13.5
1.65V/cell	854	544	459	367	278	191	160	96.0	68.8	55.3	46.6	39.8	30.8	25.8	13.6
1.60V/cell	882	566	474	382	284	196	162	96.5	69.5	56.0	47.0	40.3	31.0	26.0	13.6

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

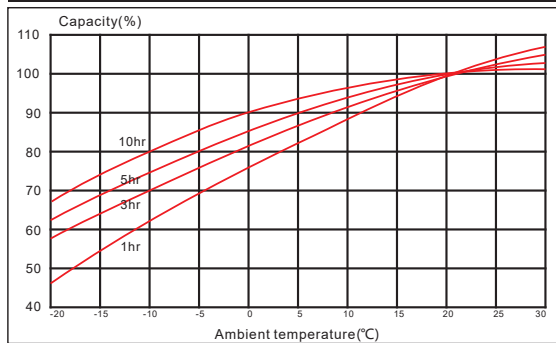
F.V/Time	5M	10M	15M	20min	30M	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1081	768	680	541	460	324	287	172	123	92.6	82.6	69.3	56.4	47.3	26.3
1.80V/cell	1211	840	760	588	501	340	310	177	126	99.5	86.5	72.8	58.3	48.1	26.5
1.75V/cell	1318	881	804	604	509	354	311	181	131	102	87.8	73.6	58.8	48.5	26.6
1.70V/cell	1414	931	809	618	514	368	314	182	131	104	88.3	74.9	59.3	49.0	26.8
1.65V/cell	1420	962	819	631	517	373	317	183	134	107	89.0	76.3	59.5	49.5	26.9
1.60V/cell	1476	992	835	645	521	379	319	184	136	110	90.0	77.6	60.0	50.1	27.0

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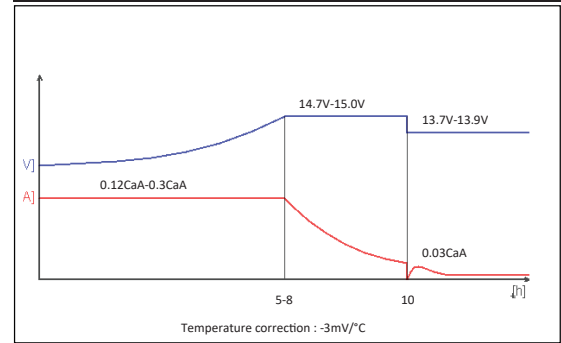
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Model Performance Diagrams

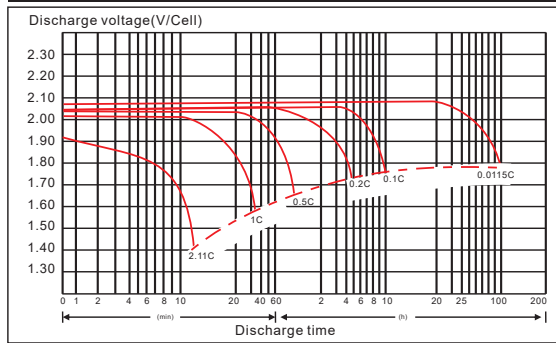
Curves of discharge capacity and ambient temperature



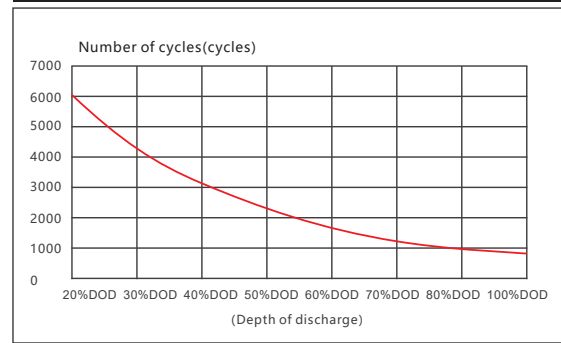
Curves of charging characteristics



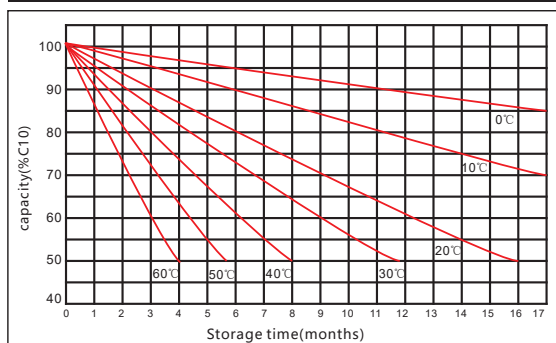
Discharge characteristics at different discharge rate(20°C)



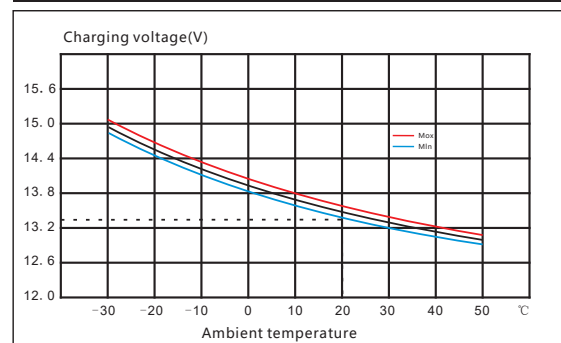
Curves of cycle life



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

