TECHNICAL DATA SHEET

DLC12-80EV



Applications

CYCLIC STATIONARY SOLAR MARINE

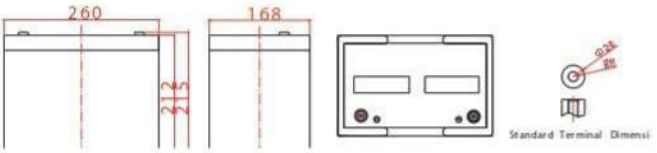
Application

- 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		80Ah
Design life		12 years
Terminal		M8
Approx. Weight		Approx 26.0 kg (53.3lbs)
Container Material		ABS
Rated Capacity	80.0Ah	10Hour Rate (8.00A to 10.8V
	62.4Ah	3Hour Rate (20.8Ato 10.8V
	47.1Ah	1Hour Rate (47.1A to 10.5V
Internal resistance		Full charged at 25°C: 6.6 Oh
Max. Discharge Current		800.0A(5S)
Operating Temperature		Discharge: -40~60℃(-40~140 Charge: -20~50℃(-4~122°I Storage: -20~50℃(-4~122°I
Charge Method (25 °C)		Max. charge Current: 24A 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

Unit: mm Dimension: 260(L)×168(W) ×212(H)×215(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	169	107	101	76.6	68.4	46.1	43.4	25.5	18.7	15.5	12.8	10.9	9.02	7.91	3.58
1.80V/cell	189	137	113	90.5	74.8	53.6	45.7	26.8	20.8	16.6	13.4	11.7	9.37	7.97	3.65
1.75V/cell	211	151	122	97.4	77.2	55.6	47.1	27.3	21.6	16.9	13.6	12.0	9.44	8.03	3.67
1.70V/cell	230	164	128	102	79.9	57.8	49.5	28.8	22.1	17.4	13.9	12.2	9.51	8.09	3.68
1.65V/cell	239	177	135	108.7	81.2	59.3	51.2	29.5	22.4	18.0	14.0	12.5	9.58	8.15	3.70
1.60V/cell	247	193	143	115.8	84.3	61.8	53.1	30.0	22.6	18.5	14.2	12.8	9.65	8.20	3.72

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

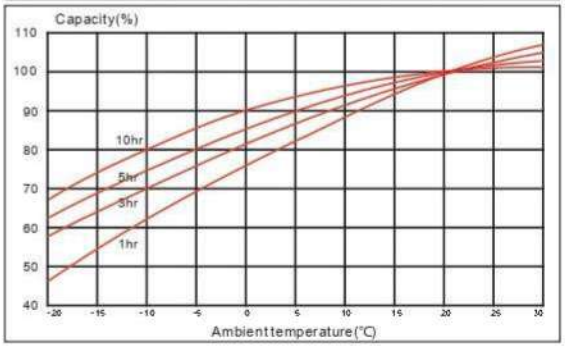
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	313	198	197	144	139	88.5	85.2	48.1	37.5	30.3	23.1	21.4	16.2	14.2	6.8
1.80V/cell	349	251	218	168	146	102	87.4	50.4	38.3	32.2	24.2	22.9	16.7	14.8	6.9
1.75V/cell	368	271	232	179	149	105	89.1	51.5	39.4	32.8	25.5	23.4	17.1	15.1	7.0
1.70V/cell	390	289	246	186	151	108	93.7	53.8	40.1	33.6	26.6	23.9	17.6	15.4	7.1
1.65V/cell	420	309	250	197	157	110	96.4	55.0	41.2	34.7	26.8	24.3	18.1	15.7	7.2
1.60V/cell	433	328	258	207	165	114	98.1	56.1	42.3	35.6	27.0	24.8	18.8	16.0	7.3

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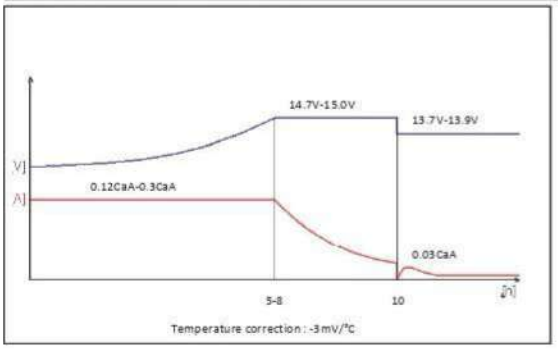
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Model Performance Diagrams

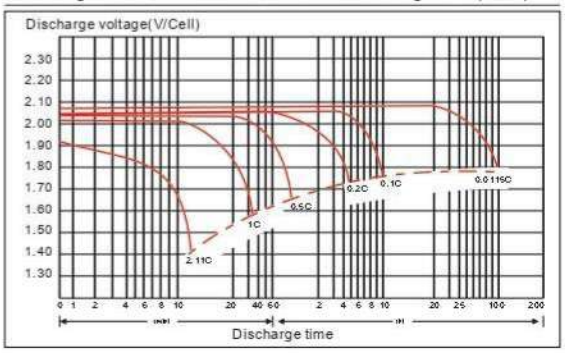
Curves of discharge capacity and ambient temperature



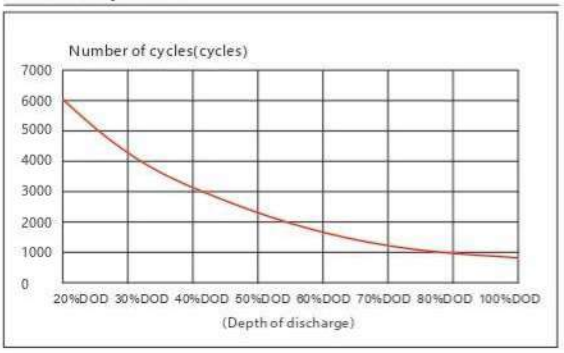
Curves of charging characteristics



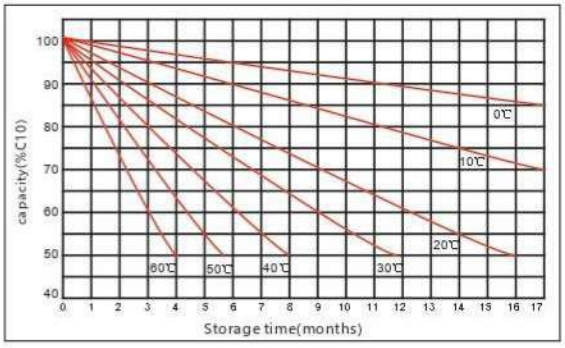
Discharge characteristics at different discharge rate(20℃)



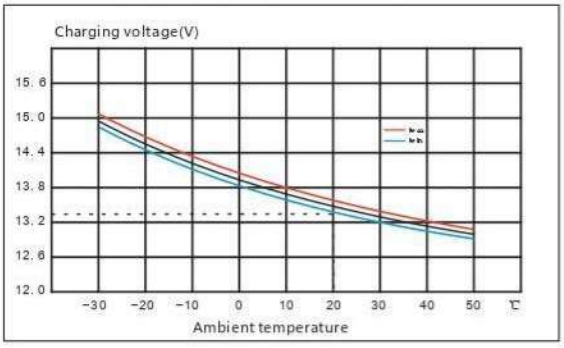
Curves of cycle life



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 (℃)	Set point	Temperature compensation	
Cycle use	25	14.40	-5mV/℃/cell	0.5C
Float use	25	13.65	-3mV/℃/cell	

The ralationship 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