

DCS Series

DCS12-100 12V100Ah



DCS series deep cycle battery is made of special high-tin corrosion-resistant alloy, It has optimized positive grid structure design and special negative active material improving charge acceptance ability and reducing negative plate sulphation. It is optimal battery for a wide range of household energy storage systems and suitable for partial state of charge (PSOC) applications.



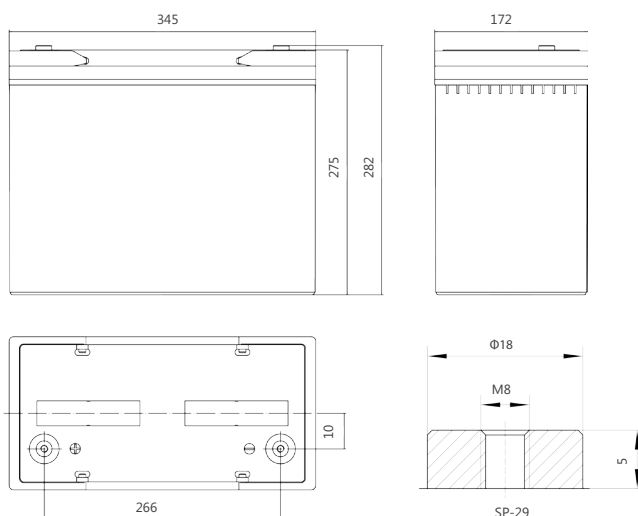
Benefits

- 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 horizontal installation, compact structure, saving the installation area and space, easy installation, convenient maintenance

Applications

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

Drawing



Standards

- IEC 60896-21/22
- IEC61427
- EUROBAT guide

Specifications

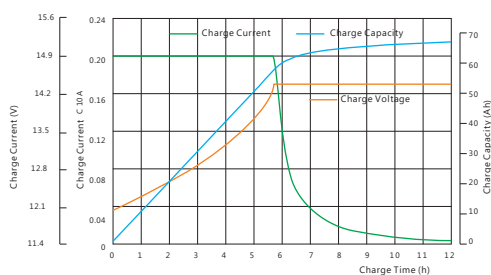
Battery Model	DCS12-100			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10HR (10.0A, 1.80V)	5HR (17.0A, 1.80V)	3HR (25A, 1.80V)	100HR(1.254A, 1.80V)
	100	85.0	75.0	125.4
Dimensions (mm)	Length	Width	Height	Total Height
	345	172	275	282
Approx. Weight (kg)	45.0			
Reference Internal Resistance (mΩ)	4.1 (full charged @ 25°C)			
Short Circuit Current (A)	2000			
Self-Discharge (25°C)	≤ 1% per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.40 (-3.5mV/°C/cell), max charge current: 40A		2.25 (-3.5mV/°C/cell)	

Discharge Data

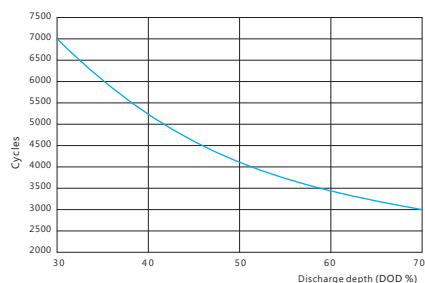
Constant Current Discharge Data (25°C, A)											
End Voltage (V/cell)	h										
	1	2	3	5	8	10	20	50	100	120	240
1.70	56.6	41.6	27.2	18.4	14.0	10.6	6.28	2.52	1.302	1.122	0.594
1.75	55.0	40.6	26.4	18.0	13.7	10.5	6.18	2.48	1.278	1.110	0.590
1.80	53.8	39.2	25.0	17.0	13.0	10.0	5.92	2.38	1.254	1.090	0.582
1.85	52.0	37.4	24.0	16.0	12.0	9.60	5.60	2.28	1.200	1.056	0.562
1.90	48.0	34.4	21.8	14.4	10.9	8.72	5.10	2.08	1.126	0.982	0.516
1.95	43.2	30.4	18.6	12.4	9.32	7.50	4.08	1.66	0.904	0.804	0.430

Constant Power Discharge Data (25°C, W/cell)											
End Voltage (V/cell)	h										
	1	2	3	5	8	10	20	50	100	120	240
1.70	102.2	75.2	49.1	33.4	26.1	19.6	11.6	4.74	2.52	2.20	1.174
1.75	100.0	74.1	48.2	32.7	25.7	19.5	11.5	4.68	2.48	2.18	1.166
1.80	98.9	72.5	46.5	31.4	25.1	19.0	11.3	4.58	2.44	2.14	1.148
1.85	96.7	70.2	45.9	30.6	23.8	18.6	11.0	4.46	2.34	2.08	1.112
1.90	92.3	66.5	42.2	28.1	22.0	17.1	10.0	4.08	2.22	1.94	1.022
1.95	83.8	59.3	36.4	24.3	19.0	15.2	8.32	3.36	1.85	1.65	0.898

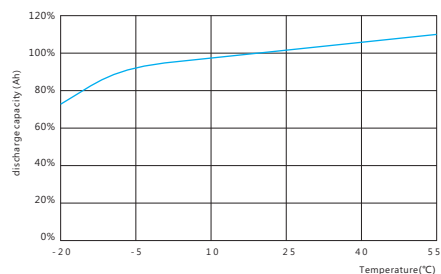
Performance Curve



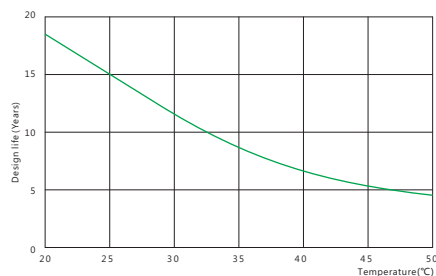
Charging characteristic



Cycle life vs. discharge depth



Discharge capacity vs. temperature



Design life vs. temperature

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and Battery designs/specification are subject to modification without notice. Contact YHI Power for latest information.

Distributor: YHI POWER PTY LTD

20-22 Venture Way, Braeside, VIC 3195

www.yhipower.com.au

