

TECHNICAL DATA SHEET

DGY12-7.5EV

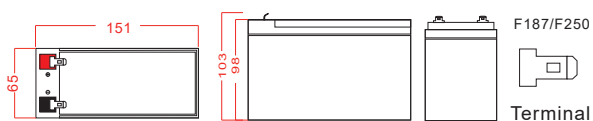


General Features

- › Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- › Relatively rich electrolyte, high temperature and low temperature performance is superior
- › Long cycle life, excellent deep cycle discharge ability
- › Excellent charge acceptance ability
- › Precision sealing technology
- › Long life



Dimension: 151(L)×65(W)×98(H)×103(TH) Unit: mm



Applications

- › Electric vehicle
- › Electric wheelchair
- › Electric scooter
- › Electric play car for children
- › Garbage truck
- › Patrol car

Specification

Nominal Voltage	12V
Nominal Capacity	8.46Ah
Design life	5 years
Terminal	F187/F250
Approx. Weight	Approx2.25kg (4.97lbs)
Container Material	ABS

8.46 Ah 20Hour Rate (0.423A to 10.5V)

Rated Capacity **7.93 Ah** 10Hour Rate (0.793 A to 10.5V)

7.90 Ah 5Hour Rate (1.58 A to 10.5V)

Operating Temperature	Discharge:	-20 ~50°C (-4~ 122°F)
	Charge:	-20 ~50°C (-4~ 122°F)
	Storage:	-20 ~50°C (-4~ 122°F)

Charge current: Max. 1.30A

Charge Method (25 °C) Float Charge: 13.7 -13.9 V, recom.13.8 V(-18mV/ °C)
Cycle charge:14.28 -14.4 V, recom.14.4 V(-30mV/ °C)

Self discharge 3% of capacity declined per month at 25°C

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Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5Min	15Min	30Min	1h	2h	3h	5h	8h	10h	20h
1.60V	30.4	16.3	9.93	5.83	3.34	2.07	1.62	1.04	0.811	0.432
1.65V	29.6	15.9	9.83	5.79	3.32	2.25	1.61	1.03	0.802	0.423
1.70V	28.4	15.5	9.65	5.74	3.29	2.22	1.59	1.03	0.802	0.423
1.75V	26.2	15.0	9.55	5.66	3.25	2.19	1.58	1.02	0.793	0.423
1.80V	23.4	14.0	9.12	5.51	3.19	2.18	1.54	1.01	0.784	0.414
1.85V	20.9	12.5	8.32	5.11	3.02	2.06	1.46	0.965	0.758	0.414

Constant Power Discharge Characteristics Unit: W/cell(25°C, 77°F)

F.V/Time	5Min	15Min	30Min	1h	2h	3h	5h	8h	10h	20h
1.60V	46.3	26.2	16.3	10.0	5.72	3.93	2.79	1.84	1.42	0.767
1.65V	44.6	25.7	16.2	9.93	5.71	3.87	2.78	1.82	1.41	0.767
1.70V	44.3	25.4	16.2	9.83	5.69	3.86	2.76	1.82	1.39	0.758
1.75V	41.4	25.2	16.1	9.74	5.66	3.83	2.74	1.80	1.37	0.758
1.80V	38.0	23.8	15.7	9.65	5.64	3.81	2.72	1.79	1.36	0.749
1.85V	33.9	21.3	14.4	8.98	5.39	3.64	2.59	1.73	1.34	0.749

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

Charger recommendations

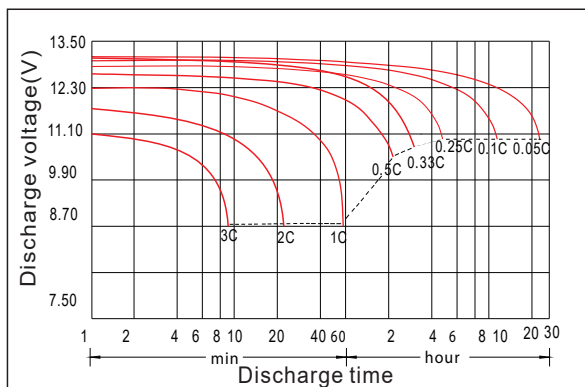
Type of charger	Zivan	AQHF WP	AQHF24-30FC G2
Matching profile	AGM =BA1+CU2	AMG SLA	AGM

Max. charging current 2.4Vpc

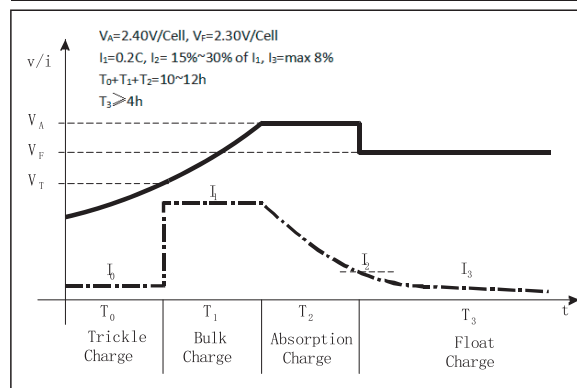
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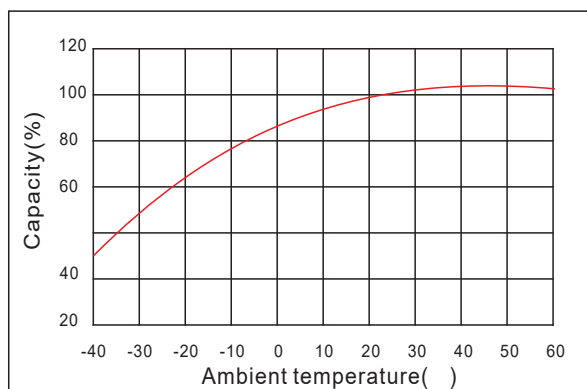
Discharge characteristic



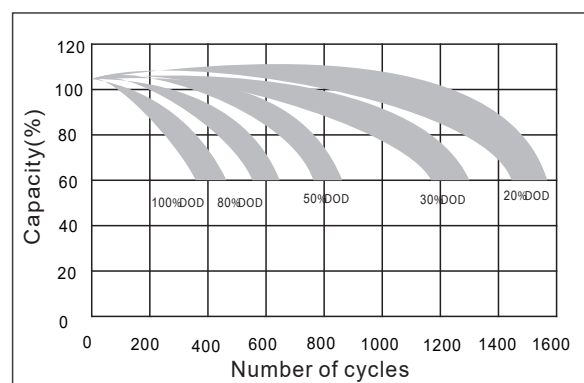
Charging characteristic



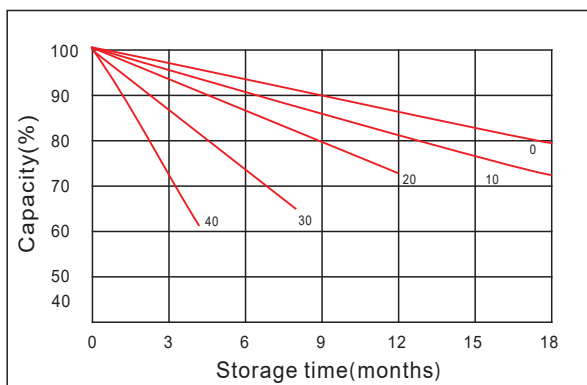
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

