PH-TEC™ Battery PH12-7

Product Features

PH-TEC™ Battery uses high magnification lead paste formulations and high corrosion resistant alloy multi-grid, and special exhaust structure and sealing technology. It has many excellent features like high discharge capacity, long life, safe and reliable, very low self-discharge rate, flexible installation, convenient maintenance etc.

Applications

For Network connection equipment, power system, UPS, power station systems, railway and marine systems.

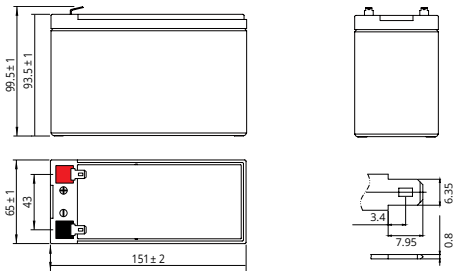
MH65343

ISO14001 ISO9001

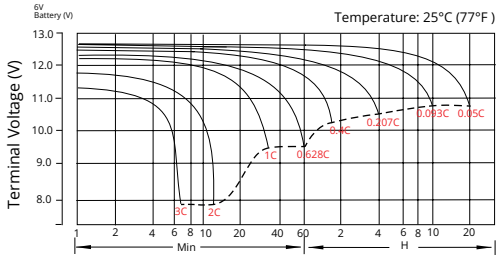
Specifications

Nominal Voltage		12V
Nominal Capacity (20HR, 1.80V/cell)		7.0 Ah
Dimension	Length Width Total Height (with Terminal)	151mm (5.94 in.) 65mm (2.56 in.) 99.5mm (3.92 in.)
Approx Weight		2.18 Kg (4.81 lbs)
Terminal		T2
Container Material		ABS (UL94, HB)
Max. Discharge Current		105A (5s)
Internal Resistance		≤ 26mΩ
Operating Temp. Range	Discharge Charge Storage	-20°C ~ 55°C (-4°F ~ 131°F) -20°C ~ 40°C (-4°F ~ 104°F) -15°C ~ 50°C (5°F ~ 122°F)
Standby Use (25°C)	Charging Current Charging Voltage Temp. Coefficient	≤ 2.1A 13.5V ~ 13.8V -3mV/cell/°C
Cycle Use (25°C)	Charging Current Charging Voltage Temp. Coefficient	≤ 2.1A 14.4V ~ 15.0V -5mV/cell/°C
Self Discharge		≤ 3% per month at 25°C

Dimensions



Discharge Characteristics



Discharge Time

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	24.8	16.0	12.0	10.1	8.2	5.87	4.84	2.89	2.22	1.71	1.38	1.14	0.99	0.79	0.64	0.35
1.80V/cell	26.5	17.0	13.5	10.6	8.3	6.21	4.90	3.16	2.43	1.95	1.48	1.23	1.06	0.84	0.66	0.35
1.75V/cell	28.3	17.5	13.8	11.0	8.4	6.42	4.97	3.27	2.51	2.01	1.52	1.26	1.08	0.85	0.69	0.37
1.70V/cell	30.0	18.0	14.0	11.3	8.4	6.59	5.05	3.38	2.60	2.02	1.56	1.30	1.11	0.86	0.70	0.38
1.67V/cell	31.8	18.5	14.2	11.7	8.6	6.75	5.10	3.44	2.66	2.03	1.59	1.31	1.12	0.87	0.70	0.38
1.60V/cell	33.5	19.0	14.5	12.0	8.6	6.94	5.15	3.59	2.78	2.05	1.65	1.37	1.17	0.89	0.72	0.39

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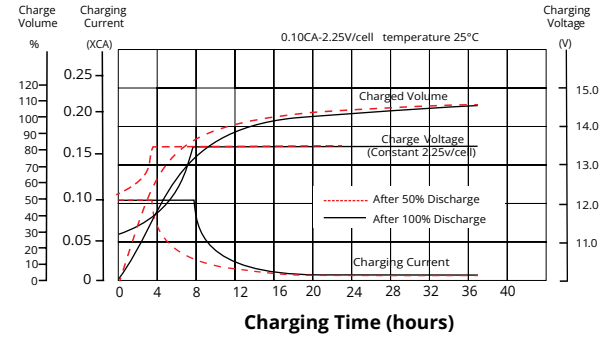
Constant Power Discharge (Watts/cell) at 25°C (77°F)

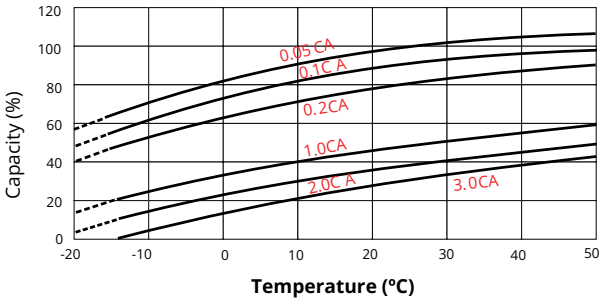
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	45.0	31.0	24.4	19.6	16.1	11.15	9.67	6.80	4.70	3.66	2.56	2.15	1.85	1.48	1.30	0.66
1.80V/cell	48.0	32.5	25.8	20.4	16.3	11.60	9.80	7.00	5.00	3.68	2.74	2.29	1.98	1.57	1.33	0.69
1.75V/cell	50.7	33.5	26.1	20.9	16.4	12.05	10.00	7.12	5.24	3.70	2.81	2.35	2.01	1.60	1.35	0.70
1.70V/cell	53.5	34.7	26.5	21.4	16.6	12.50	10.10	7.30	5.50	3.72	2.88	2.40	2.06	1.61	1.37	0.71
1.67V/cell	56.3	35.7	26.9	22.0	16.8	12.95	10.30	7.50	5.77	3.73	2.92	2.43	2.08	1.63	1.38	0.71
1.60V/cell	59.0	36.0	27.2	22.6	17.0	13.40	10.40	7.65	6.00	3.75	3.02	2.51	2.14	1.65	1.40	0.72

PH-TEC™ Battery PH12-7 Typical Curves

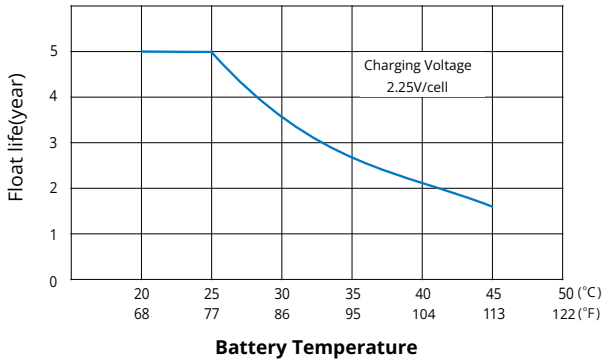
Float Charging Characteristics



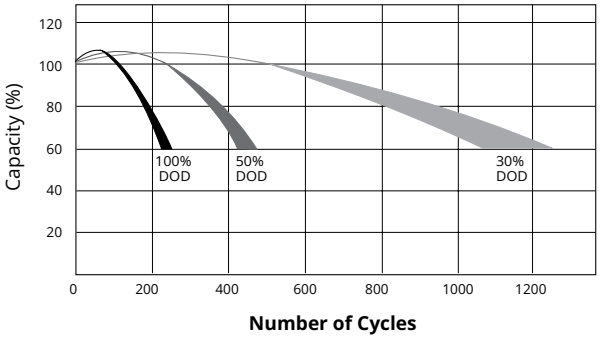
Temperature Effects in Relation to Battery Capacity



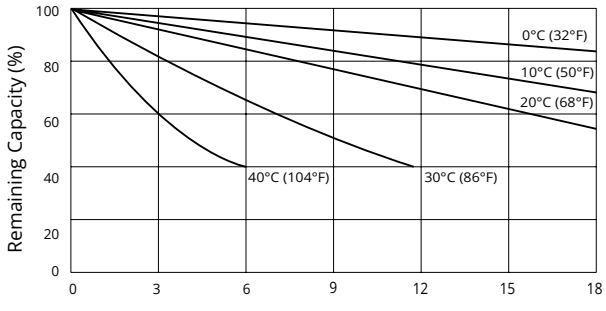
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



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