

Castle Battery C12-18AH



Product Features

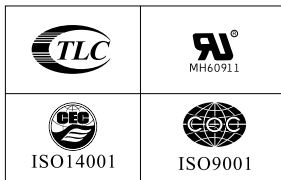
STK CASTLE series battery uses high magnification lead paste formulations and high corrosion resistant alloy multi-grid, and special exhaust structure and sealing technology. It has many excellent features like high discharge capacity, long life, safe and reliable, very low self-discharge rate, flexible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

Specifications

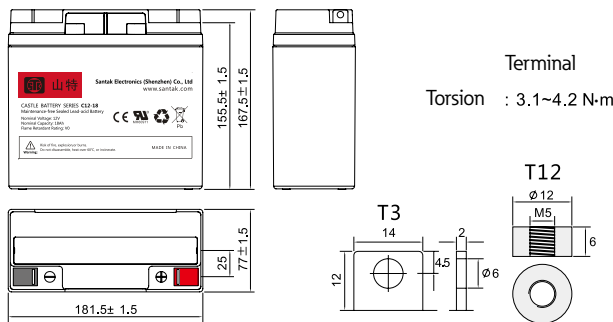
Nominal Voltage	12V
Nominal Capacity	18Ah
Dimension (L*W*H)	181.5*77*167.5mm
Approx Weight	5.4Kg
Internal Resistance	16.2mΩ
Operating Temperature Range	Charging: 0 to 40°C
	Discharging: -20 to 55°C
	Storage: -15 to 50°C
Capacity Affected by Temperature	103% C_{20} @40°C
	100% C_{20} @25°C
	86% C_{20} @0°C
Cycle Use Charging Voltage	13.5 to 13.8V; Recom. 13.7V
Cycle Use Charging Voltage	14.1 to 14.4V; Recom. 14.1V
Float Charging Temp. Coefficient	-20mV/°C
Cycle Use Charging Temp. Coefficient	-30mV/°C
Max. Charging Current	5.4A
Max. Charging Current	81A
Month Self Discharge	2% (20°C)
Terminal	T3/T12 (M5)
Container Material	ABS (UL94-V0)

Application

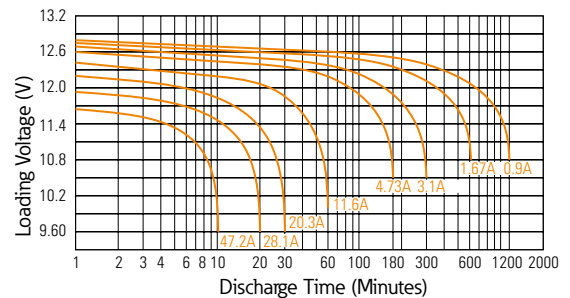
For small or middle UPS, lamp, starter, equipment, signal control, power supply and other consumer products supporting



Dimensions



Discharge Characteristics



Constant Power Discharge (Watts/Cell@25°C)

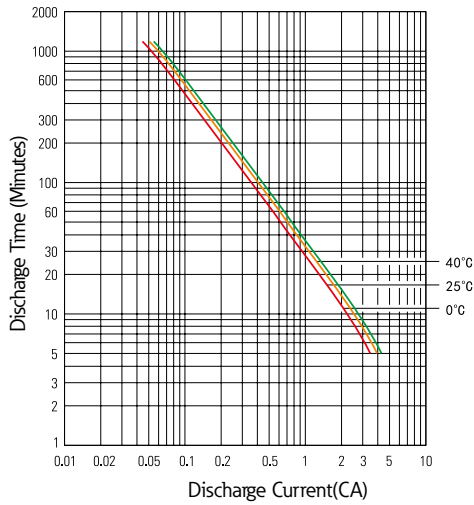
F.V.	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.80	99.1	69.7	54.6	44.3	32.86	24.19	20.33	15.09	12.05	9.00	7.12	5.94	5.10	4.05	3.31	1.79
1.75	106.7	73.8	57.2	46.1	34.06	24.98	20.93	15.50	12.35	9.20	7.27	6.06	5.19	4.11	3.35	1.81
1.70	114.0	77.8	59.8	48.0	35.23	25.73	21.55	15.93	12.67	9.43	7.43	6.18	5.29	4.18	3.40	1.83
1.67	118.0	80.1	61.7	49.0	35.93	26.17	21.90	16.15	12.84	9.55	7.51	6.24	5.34	4.21	3.43	1.84
1.60	128.6	85.7	64.7	51.5	37.50	27.23	22.74	16.74	13.28	9.84	7.72	6.40	5.47	4.30	3.49	1.87

Constant Current Discharge (Ampere@25°C)

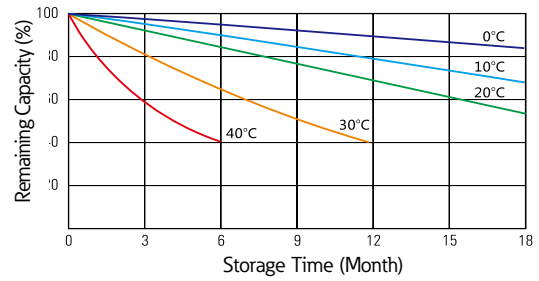
F.V.	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.80	52.7	36.8	28.7	23.2	17.15	12.57	10.53	7.78	6.19	4.61	3.64	3.03	2.59	2.05	1.67	0.90
1.75	57.5	39.4	30.3	24.4	17.92	13.08	10.92	8.04	6.38	4.73	3.73	3.10	2.65	2.09	1.70	0.91
1.70	62.2	42.0	32.1	25.6	18.71	13.58	11.32	8.32	6.59	4.87	3.82	3.17	2.70	2.13	1.73	0.92
1.67	65.0	43.6	33.1	26.4	19.18	13.88	11.56	8.47	6.70	4.95	3.87	3.21	2.74	2.15	1.74	0.93
1.60	71.6	47.2	35.5	28.1	20.27	14.60	12.12	8.84	6.98	5.13	4.00	3.30	2.81	2.20	1.78	0.95

Castle Battery C12-18AH Typical Curves

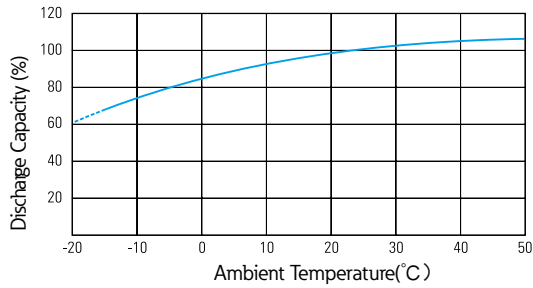
Discharge Current in Relation to Discharge Time



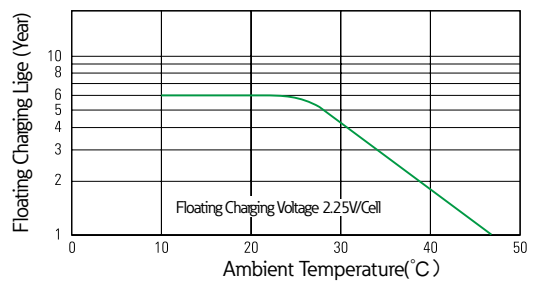
Self-discharge Characteristics



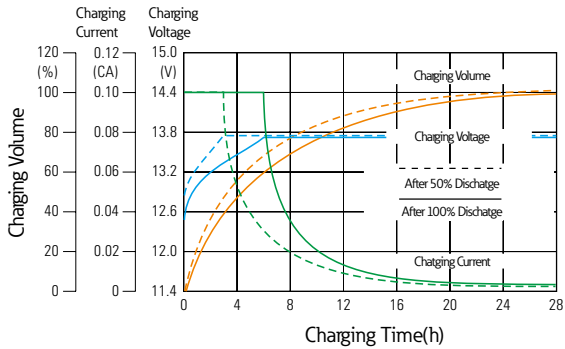
Ambient Temperature in Relation to Discharge Capacity



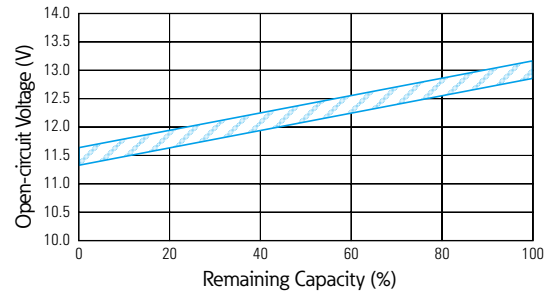
Float Charging Life Characteristics



Charging Characteristics



Open-circuit Voltage in Relation to Remaining Capacity



(Note: Please charge the battery in time. Otherwise it will damage the battery.)

* Specifications are subject to change without prior notice.

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