intAct Block-Power

SURTEC
Les spécialistes
de l'autonomie énergétique

BP12-7.0(12V7.0AH)

Specification

Nominal Voltage	12V
Nominal Capacity(20HR)	7.0AH
Dimensions	Length 151±2mm (5.94 inches) Width 65±1mm (2.56 inches) Container Height 94±1mm (3.70 inches) Total Height (with Terminal) 99.5±1mm (3.92 inches)
Approx Weight	Approx 2.30 kg (5.07lbs)
Terminal	T1 / T2
Container Material	ABS UL.94:HB0(optional ABS UL.94:V0)
Rated Capacity	7.0 AH/0.35A (20hr ,1.80V/cell,25°C/77°F) 6.51AH/0.651A (10hr,1.80V/cell,25°C/77°F) 5.95 AH/1.19A (5hr,1.75V/cell,25°C/77°F) 5.22 AH/1.74A (3hr,1.75V/cell,25°C/77°F) 4.37 AH/4.37A (1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	105A (5s)
Internal Resistance	Approx 18mΩ
Operating Temp.Range	Discharge : -15~50°C (5~122°F) Charge : 0~40°C (32~104°F) Storage : -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 2.1A.Voltage 14.4V~15.0V at 25° C(77° F)Temp. Coefficient -30mV/°C
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25° C(77° F)Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40° C (104° F) 103% 25° C (77° F) 100% 0° C (32° F) 86%
Self Discharge	General purpose batteries may be stored for up to 6 months at 25° C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.
Life expectancy	3~5 years at 25°C with charge voltage of 2.25V/cell

Applications

- *All purpose*
- *Uninterruptable Power Supply (UPS)*
- *Electric Power System (EPS)*
- *Emergency backup power supply*
- *Emergency light*
- *Railway signal*
- *Aircraft signal*
- *Alarm and security system*
- *Electronic apparatus and equipment*
- *Communication power supply*
- *DC power supply*
- *Auto control system*

MH45680 ISO14001 Intertek ETL SEMKO

ISO9001 VdS G108051

Comform to:
IEC60896-21&22 and/or IEC61427

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	13.3	8.86	7.31	6.43	5.26	4.11	3.40	2.09	1.57	1.29	1.10	0.95	0.756	0.631	0.347
1.80V/cell	16.0	10.6	8.6	7.35	5.88	4.51	3.68	2.24	1.68	1.38	1.15	0.99	0.784	0.651	0.350
1.75V/cell	19.2	12.2	9.5	8.13	6.30	4.83	3.89	2.33	1.74	1.41	1.19	1.02	0.805	0.667	0.354
1.70V/cell	22.2	13.6	10.5	8.80	6.72	5.06	4.06	2.42	1.78	1.44	1.21	1.04	0.817	0.678	0.360
1.65V/cell	24.5	14.7	11.3	9.43	7.07	5.28	4.20	2.49	1.83	1.48	1.24	1.06	0.830	0.686	0.365
1.60V/cell	27.0	16.0	12.1	9.95	7.45	5.50	4.37	2.56	1.87	1.52	1.27	1.09	0.848	0.698	0.367

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

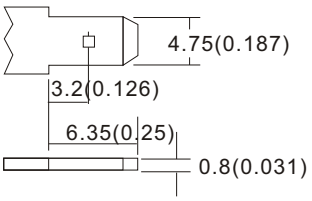
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	24.9	16.6	13.7	12.1	10.0	7.88	6.57	4.06	3.07	2.53	2.15	1.87	1.492	1.250	0.686
1.80V/cell	28.9	19.5	15.9	13.8	11.1	8.58	7.06	4.32	3.26	2.67	2.25	1.94	1.543	1.286	0.692
1.75V/cell	34.3	22.1	17.5	15.1	11.8	9.14	7.43	4.49	3.35	2.73	2.31	1.99	1.581	1.317	0.698
1.70V/cell	39.2	24.3	19.1	16.2	12.5	9.52	7.73	4.63	3.43	2.79	2.35	2.03	1.603	1.336	0.710
1.65V/cell	42.6	26.0	20.2	17.2	13.1	9.88	7.95	4.76	3.51	2.85	2.40	2.07	1.625	1.351	0.719
1.60V/cell	46.2	27.7	21.4	17.8	13.6	10.2	8.21	4.86	3.58	2.91	2.44	2.11	1.656	1.372	0.722

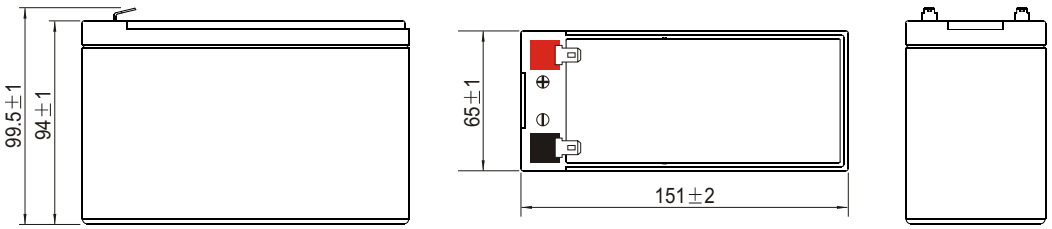
Updated: 19.08.2013

Dimensions

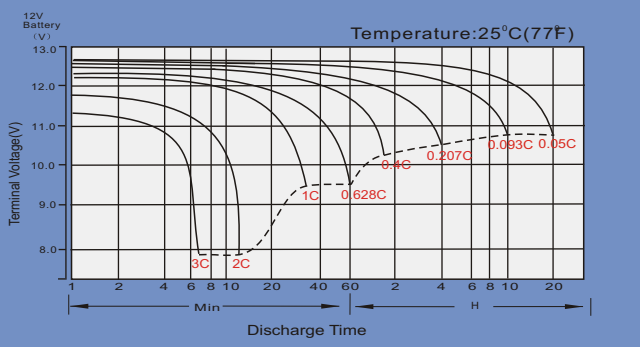
■ T1 Terminal

Unit: mm [inches]

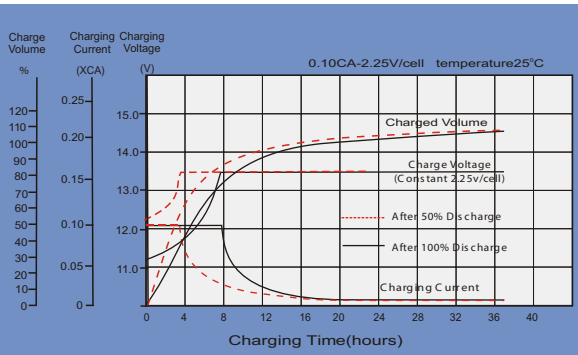




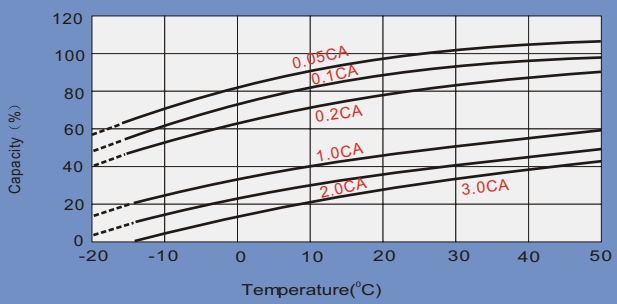
Discharge Characteristics



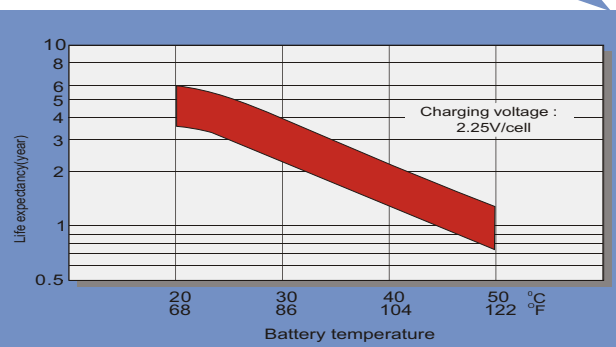
Float Charging Characteristics



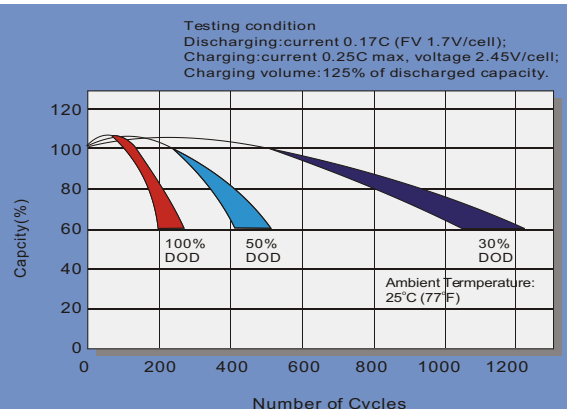
Temperature Effects in Relation to Battery Capacity



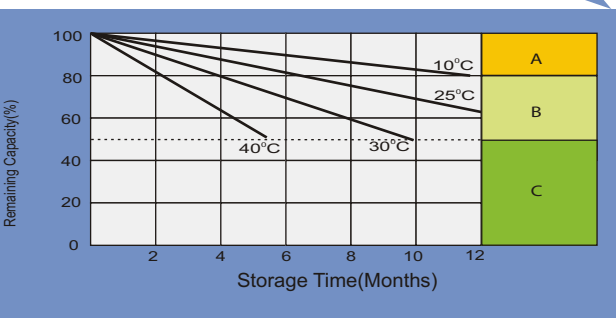
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A — No supplementary charge required before use if 100% capacity is required.)
(Carry out supplementary charge before use if 100% capacity is required.)

B — Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant voltage 2.25V/cell.
2.Charged for above 20 hours at limted current 0.25CA and constant voltage 2.45V/cell.
3.Charged for 8 ~10hours at limted current 0.05 CA.

C — Supplementary charge may often fail to recover the capacity.

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