LP SERIES-General Purpose

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	7AH	
Dimensions	Length	151±2mm (5.94 inches)
	Width	65±1mm (2.54 inches)
	Container Height	93.5±1mm (3.68 inches)
	Total Height (with Terminal)	99±1mm (3.90 inches)
Approx Weight	Approx 1.9kg	
Terminal	T1 Faston 4.8 mm	
Container Material	ABS	
Rated Capacity	6.50AH/0.325A	(20hr,1.80V/cell,25 °C/77 °F)
	6.05AH/0.605A	(10hr,1.80V/cell,25 °C/77 °F)
	5.55AH/1.11A	(5hr,1.75V/cell,25 °C/77 °F)
	4.98AH/1.66A	(3hr,1.75V/cell,25 °C/77 °F)
	4.08AH/4.08A	(1hr,1.60V/cell,25 °C/77 °F)
Max. Discharge Current	97.5A (5s)	
Internal Resistance	Approx 30mΩ	
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 1.95A. 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	series batterys 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.	

Applications

- All purpose
- Uninterruptable Power Supply(UPS)
- Electric Power System(EPS)
- Emergency backuppower supply
- Emergency light
- Railway signal
- Aircraft signal
- Alarm and securitysystem
- Electronic apparatusand equipment
- Communication power supply
- DC power supply
- Auto controlsystem

VdS Intertek ETL SEMKO MH26866 ISO14001 ISO9001 EMC tested

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	12.4	9.51	7.87	6.81	5.26	3.88	3.27	1.93	1.51	1.23	1.00	0.870	0.702	0.586	0.322
1.80V/cell	16.6	12.1	9.51	8.05	6.21	4.51	3.66	2.11	1.63	1.31	1.08	0.933	0.744	0.605	0.325
1.75V/cell	18.7	13.3	10.39	8.66	6.45	4.68	3.83	2.19	1.66	1.34	1.11	0.959	0.757	0.621	0.328
1.70V/cell	20.6	14.5	11.1	9.10	6.71	4.87	3.95	2.24	1.70	1.38	1.13	0.979	0.768	0.633	0.334
1.65V/cell	22.7	15.7	11.8	9.67	7.08	4.99	4.04	2.28	1.78	1.43	1.16	1.00	0.780	0.646	0.339
1.60V/cell	25.1	17.0	12.6	10.3	7.48	5.20	4.08	2.37	1.83	1.47	1.20	1.02	0.788	0.653	0.341

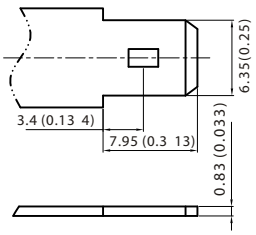
Constant Power Discharge (Watts) at 25 °C (77 °F)

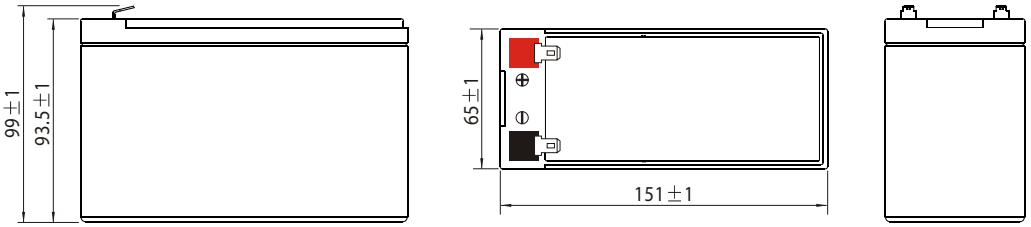
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	22.6	17.6	14.7	12.8	10.0	7.45	6.31	3.75	2.95	2.40	1.97	1.71	1.39	1.16	0.637
1.80V/cell	30.1	22.2	17.5	14.9	11.7	8.60	7.02	4.07	3.15	2.55	2.10	1.83	1.47	1.19	0.643
1.75V/cell	33.2	24.0	18.9	15.9	12.0	8.84	7.32	4.20	3.20	2.60	2.15	1.87	1.49	1.23	0.648
1.70V/cell	35.5	25.5	19.9	16.6	12.4	9.16	7.52	4.30	3.28	2.67	2.20	1.91	1.51	1.25	0.660
1.65V/cell	38.6	27.3	21.0	17.5	13.0	9.31	7.64	4.34	3.41	2.75	2.25	1.94	1.53	1.27	0.668
1.60V/cell	41.6	29.0	22.1	18.5	13.6	9.65	7.67	4.50	3.50	2.82	2.32	1.98	1.54	1.28	0.671

Dimensions

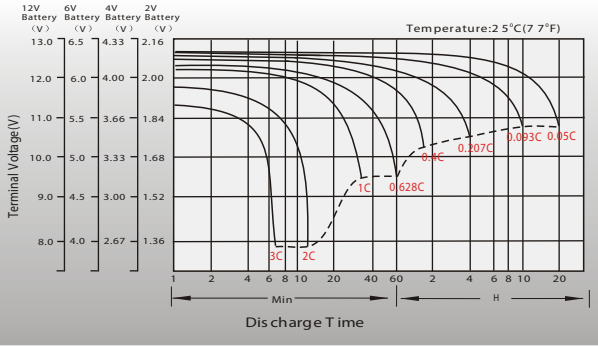
T2 Terminal

Unit: mm [inches]

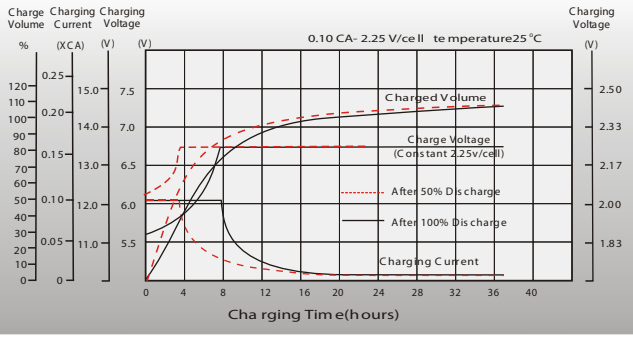




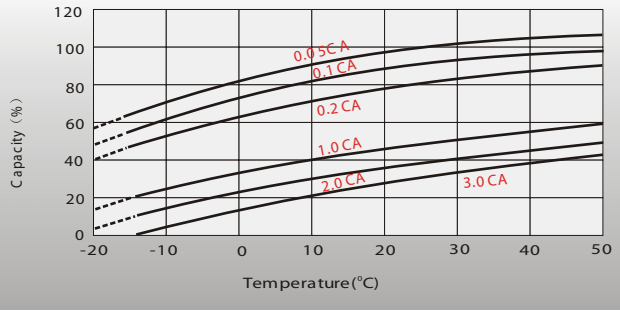
Discharge Characteristics



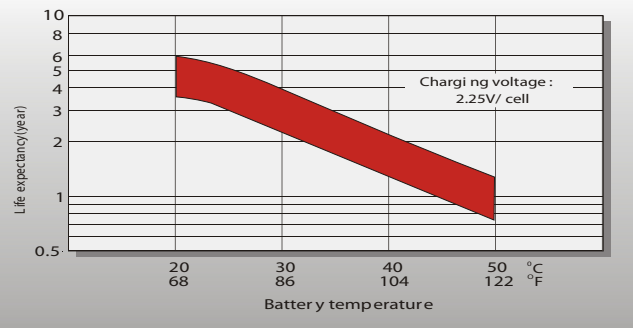
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity

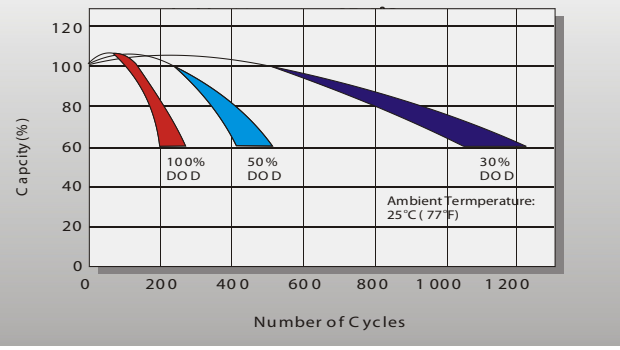


Effect of Temperature on Long Term Float Life

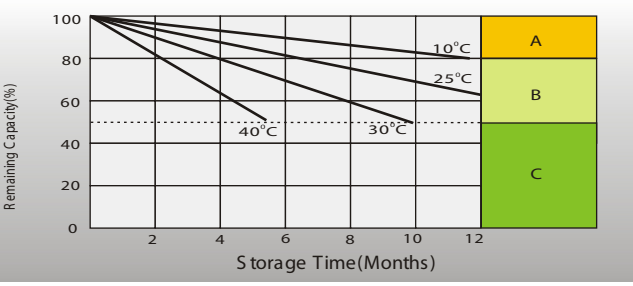


Cycle Life in Relation to Depth of Discharge

Testing condition
Discharging:current 0.17C (FV 1.7V/cell);
Charging:current 0.25C max, voltage 2.45V/cell;
Charging volume: 125% of discharged capacity.



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. The battery should never be left standing till this is reached.