

Specifications

Nominal Voltage	12V	
Nominal Capacity (20HR)	7.5AH	
Dimension	Length	151mm (5.95 inches)
	Width	65mm (2.56 inches)
	Height	94mm (3.70 inches)
	Total Height (with Terminal)	100mm (3.94 inches)
	Approximate Weight	2.20 kg (4.85 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	T1	
Rated Capacity	7.58AH	(20hr, 1.75V/cell, 25°C/77°F)
	7.16AH	(10hr, 1.75V/cell, 25°C/77°F)
	6.40AH	(5hr, 1.75V/cell, 25°C/77°F)
	6.33AH	(3hr, 1.60V/cell, 25°C/77°F)
	4.71AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	112.5A	
Internal Resistance	20mΩ	
Operating Temp. Range	Discharge:	-20°C(-4°F)~50°C (122°F)
	Charge:	-20°C(-4°F)~50°C (122°F)
	Storage:	-20°C(-4°F)~40°C (104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Container Material	ABS (Option: 94-HB & 94-V0 flame retardant case)	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	SigmasTek SP series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter.	



Applications

- Uninterruptible Power Supply (UPS)
- Electric wheelchairs, scooters, bikes
- Electronic apparatus and equipment
- Alarm and security systems
- Emergency first responder equipment
- Emergency lighting
- Medical devices
- Electric carts
- Telecom equipment
- Switchgear
- Solar power systems



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

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	29.0	19.7	14.6	8.63	4.71	2.74	2.11	1.39	0.909	0.754	0.393
1.65V	26.2	18.1	13.6	8.17	4.67	2.63	2.05	1.34	0.900	0.746	0.391
1.70V	23.8	16.8	12.8	7.74	4.56	2.59	1.97	1.31	0.886	0.731	0.386
1.75V	21.6	15.4	12.0	7.44	4.42	2.52	1.91	1.28	0.874	0.716	0.379
1.80V	19.2	14.0	11.0	7.17	4.22	2.43	1.88	1.24	0.859	0.698	0.375
1.85V	14.3	11.0	9.09	6.07	3.77	2.23	1.75	1.16	0.810	0.677	0.371

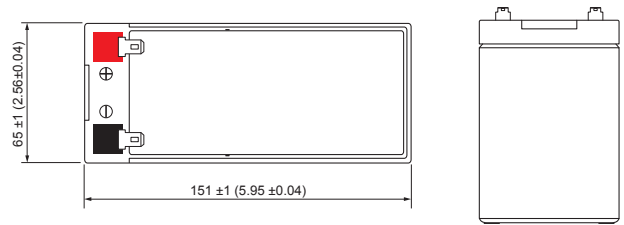
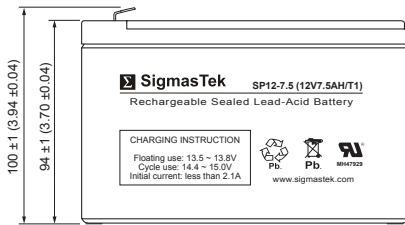
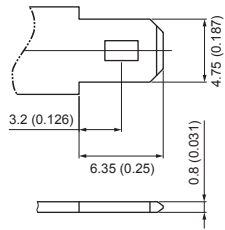
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	55.5	34.3	26.3	15.5	8.88	5.12	3.72	2.47	1.660	1.367	0.734
1.65V	52.6	32.9	25.5	15.2	8.73	5.05	3.68	2.45	1.649	1.359	0.731
1.70V	49.2	31.3	24.5	14.7	8.48	4.96	3.62	2.42	1.633	1.347	0.725
1.75V	45.1	29.5	23.3	14.2	8.23	4.85	3.55	2.39	1.616	1.334	0.719
1.80V	40.2	24.5	21.9	13.5	7.96	4.72	3.47	2.34	1.593	1.318	0.708
1.85V	34.2	23.3	20.2	12.8	7.64	4.56	3.37	2.29	1.565	1.296	0.701

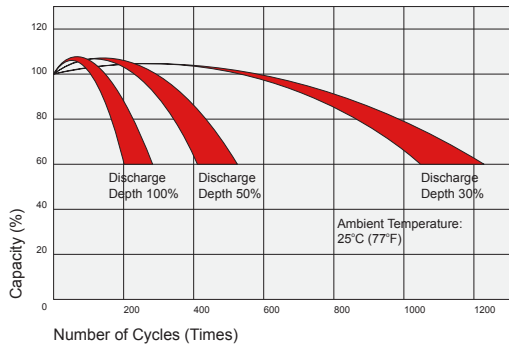
Dimensions

T1 Terminal

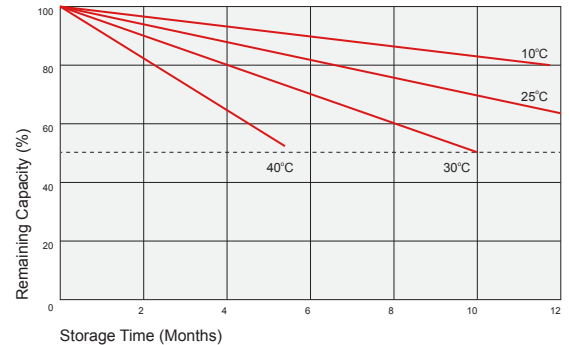
Unit: mm (inches)



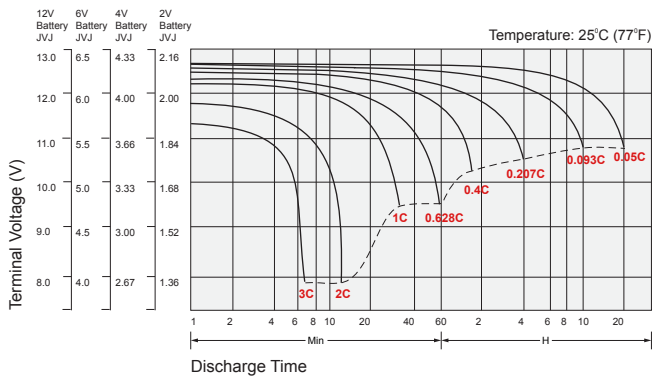
Cycle Service Life



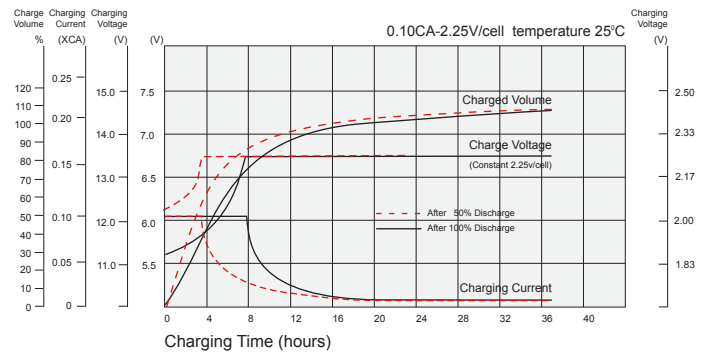
Self Discharge Characteristics



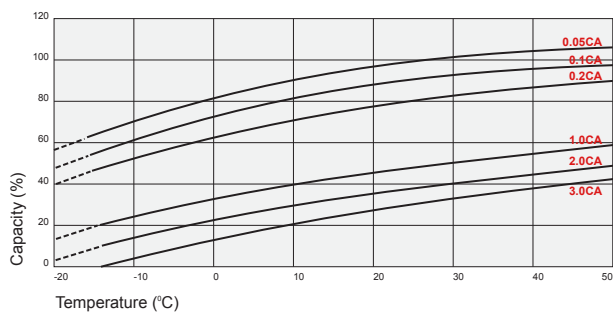
Discharge Characteristics



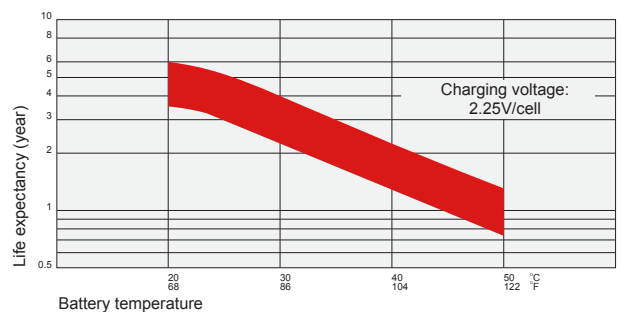
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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