

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	2.30 kg (5.06 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	T2	
Rated Capacity	7.50AH	(20hr, 1.75V/cell, 25°C/77°F)
	7.19AH	(10hr, 1.75V/cell, 25°C/77°F)
	6.20AH	(5hr, 1.75V/cell, 25°C/77°F)
	5.94AH	(3hr, 1.60V/cell, 25°C/77°F)
	5.28AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	108A	
Internal Resistance	22mΩ	
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 HR 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	33.4	19.4	15.9	9.35	5.28	2.81	1.98	1.27	0.850	0.750	0.390
1.67V	31.5	18.8	15.8	9.32	5.25	2.79	1.96	1.26	0.845	0.729	0.385
1.70V	30.2	18.4	15.6	9.24	5.22	2.78	1.95	1.25	0.840	0.719	0.375
1.75V	28.7	17.8	15.1	9.10	5.18	2.77	1.93	1.24	0.840	0.719	0.375
1.80V	22.8	16.6	14.4	8.81	5.07	2.73	1.92	1.22	0.820	0.708	0.375
1.85V	18.7	16.0	12.1	6.80	4.50	2.40	1.78	1.16	0.780	0.688	0.371

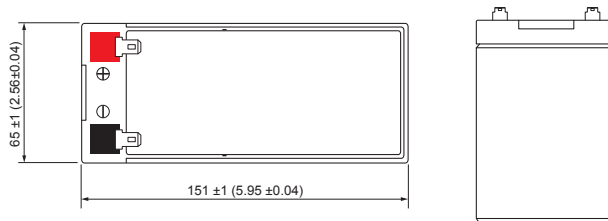
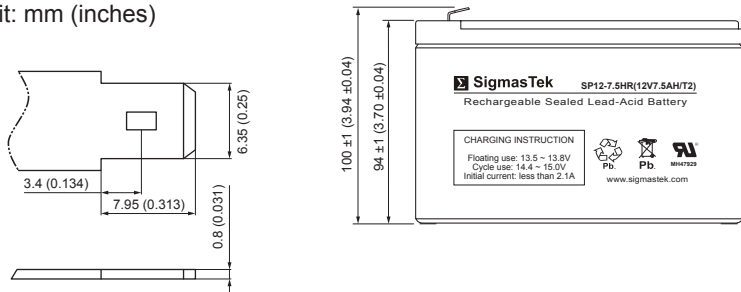
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	57.5	36.5	28.7	17.8	10.4	6.02	4.28	2.82	1.94	1.59	0.86
1.67V	55.0	35.3	28.3	17.5	10.3	6.00	4.27	2.79	1.93	1.59	0.86
1.70V	50.8	35.0	27.8	17.3	10.3	6.00	4.25	2.78	1.92	1.58	0.85
1.75V	46.7	34.0	26.8	17.2	10.2	5.97	4.23	2.76	1.88	1.58	0.85
1.80V	42.5	31.3	25.7	16.7	10.1	5.90	4.20	2.75	1.88	1.56	0.84
1.85V	39.2	28.3	22.0	16.2	10.0	5.78	4.13	2.68	1.87	1.54	0.82

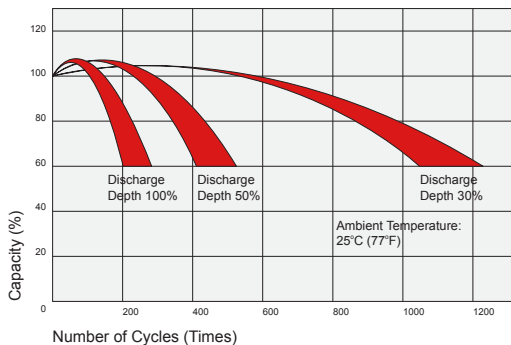
Dimensions

T2 Terminal

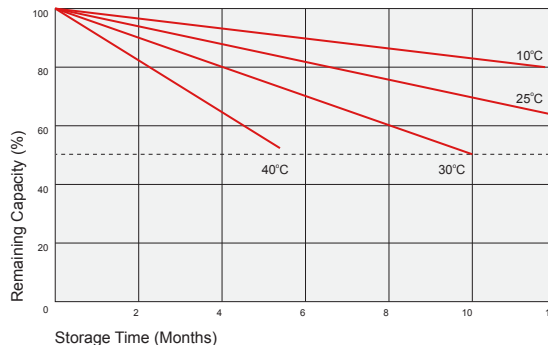
Unit: mm (inches)



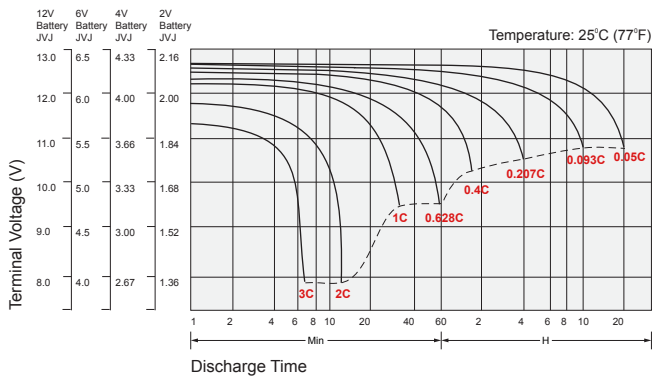
Cycle Service Life



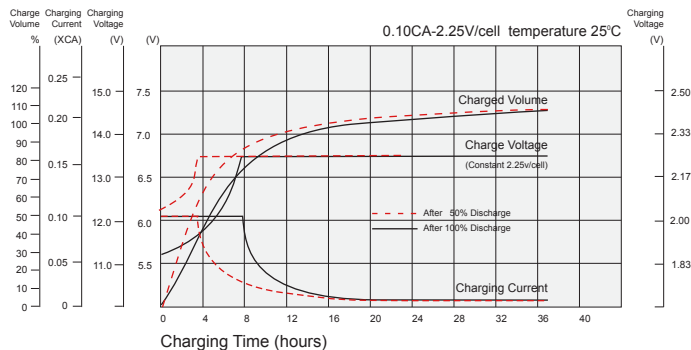
Self Discharge Characteristics



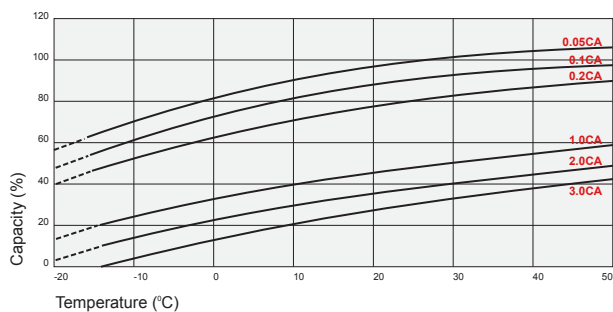
Discharge Characteristics



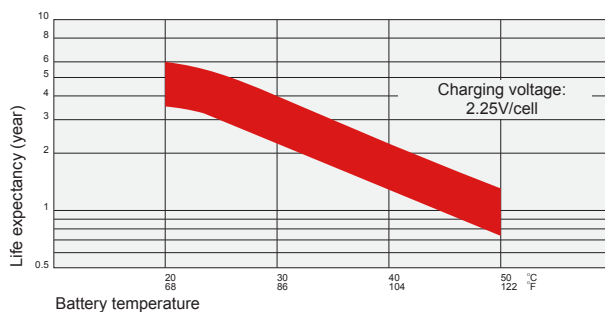
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



Contact Information

SigmatTek
105 East 34th Street, Suite 257
New York, NY 10016, USA

T: 800-404-3475
F: 877-661-7089
www.sigmastek.com