

Specifications

Nominal Voltage	12V		
Nominal Capacity (20HR)	12AH		
Dimension	Length	151mm (5.95 inches)	
	Width	98mm (3.86 inches)	
	Height	94mm (3.70 inches)	
	Total Height (with Terminal)	100mm (3.94 inches)	
	Approximate Weight	3.95 kg (8.71 lbs)	
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design		
Terminal Type	T2		
Rated Capacity	12.2AH	(20hr, 1.75V/cell, 25°C/77°F)	
	11.4AH	(10hr, 1.75V/cell, 25°C/77°F)	
	10.2AH	(5hr, 1.75V/cell, 25°C/77°F)	
	10.0AH	(3hr, 1.60V/cell, 25°C/77°F)	
	7.20AH	(1hr, 1.60V/cell, 25°C/77°F)	
Max. Discharge Current	180A		
Internal Resistance	30mΩ		
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		47.3	33.1	22.0	13.4	7.20	4.90	3.35	2.21	1.385	1.22	0.670
1.67V		43.9	31.8	21.3	12.9	7.13	4.85	3.17	2.16	1.380	1.20	0.660
1.70V		40.6	31.6	20.7	11.7	6.86	4.80	3.00	2.11	1.370	1.16	0.640
1.75V		40.1	29.8	20.0	11.1	6.72	4.74	2.93	2.05	1.362	1.14	0.610
1.80V		35.5	27.9	18.2	10.3	6.26	4.70	2.86	2.02	1.360	1.13	0.600
1.85V		31.7	25.3	16.7	9.80	6.02	4.56	2.80	1.97	1.320	1.09	0.595

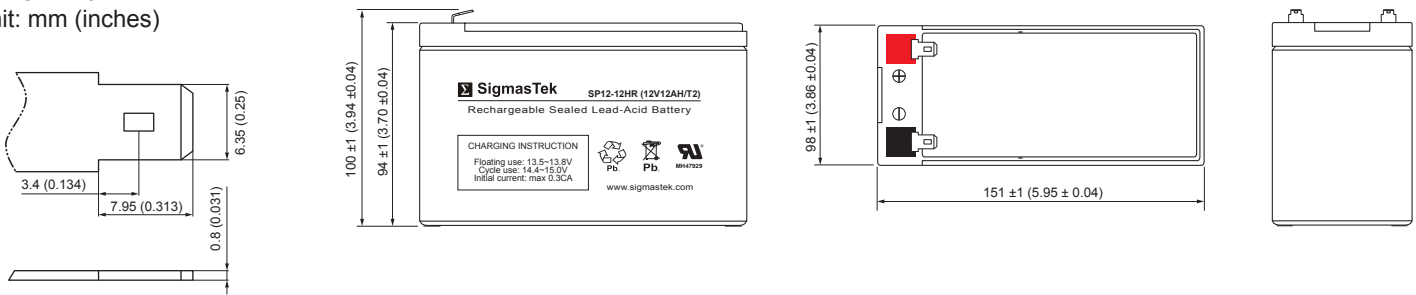
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell)	Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V		96.3	57.7	48.0	27.8	16.3	9.32	6.60	4.22	2.79	2.32	1.37
1.67V		92.9	56.7	47.3	27.4	16.2	9.23	6.52	4.16	2.76	2.31	1.33
1.70V		89.0	56.1	46.1	26.9	16.1	9.22	6.48	4.15	2.75	2.31	1.32
1.75V		83.8	54.3	44.6	26.2	16.0	9.15	6.42	4.07	2.71	2.30	1.32
1.80V		73.4	51.1	42.7	25.4	15.8	8.93	6.28	4.00	2.64	2.27	1.31
1.85V		64.7	46.7	38.5	24.1	15.3	8.75	6.03	3.88	2.58	2.22	1.29

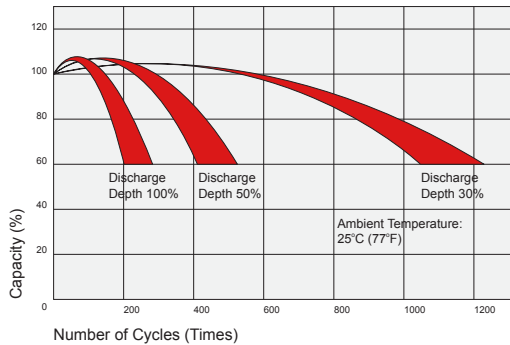
Dimensions

T2 Terminal

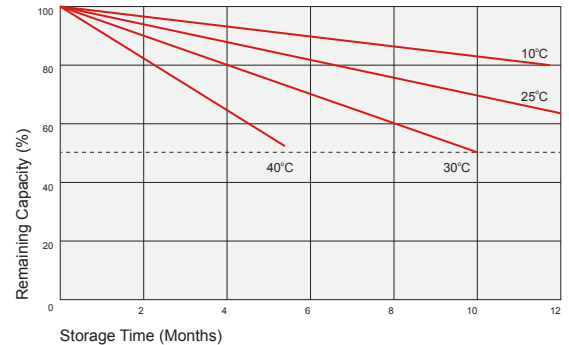
Unit: mm (inches)



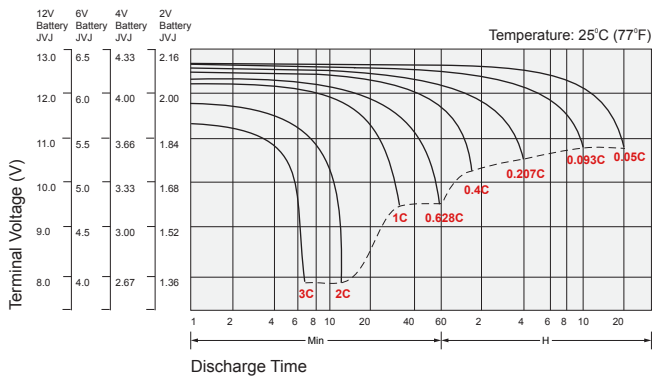
Cycle Service Life



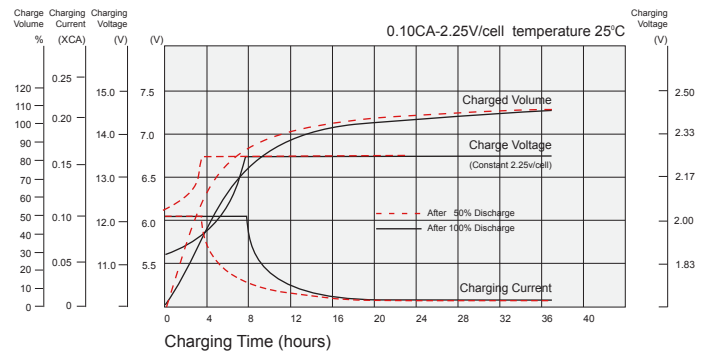
Self Discharge Characteristics



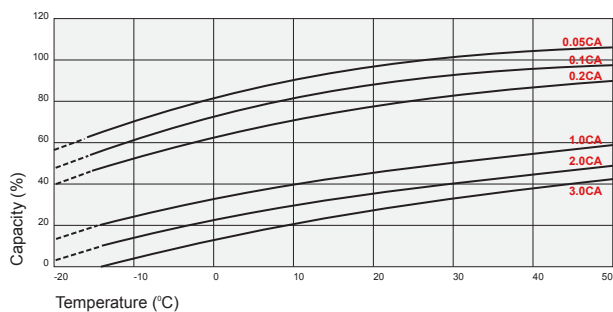
Discharge Characteristics



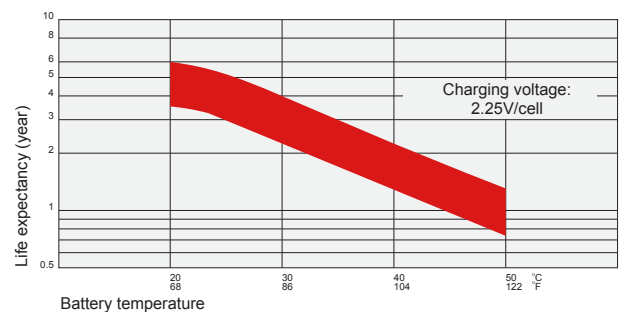
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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