

Specifications

Nominal Voltage	12V	
Nominal Capacity (20HR)	3.5AH	
Dimension	Length	133mm (5.24 inches)
	Width	67mm (2.64 inches)
	Height	60mm (2.36 inches)
	Total Height (with Terminal)	66mm (2.60 inches)
	Approximate Weight	1.35 kg (2.98 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	T1	
Rated Capacity	3.54AH	(20hr, 1.75V/cell, 25°C/77°F)
	3.34AH	(10hr, 1.75V/cell, 25°C/77°F)
	3.00AH	(5hr, 1.75V/cell, 25°C/77°F)
	2.97AH	(3hr, 1.60V/cell, 25°C/77°F)
	2.20AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	52.5A	
Internal Resistance	45mΩ	
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	13.5	9.20	6.79	4.03	2.20	1.28	0.99	0.65	0.424	0.352	0.183
1.65V	12.2	8.45	6.35	3.81	2.18	1.23	0.96	0.63	0.420	0.348	0.182
1.70V	11.1	7.83	6.97	3.61	2.13	1.21	0.92	0.61	0.413	0.341	0.180
1.75V	10.1	7.19	5.60	3.47	2.06	1.18	0.89	0.60	0.408	0.334	0.177
1.80V	8.90	6.54	5.12	3.34	1.97	1.14	0.88	0.58	0.401	0.326	0.175
1.85V	6.67	5.12	4.24	2.83	1.76	1.04	0.81	0.54	0.378	0.316	0.173

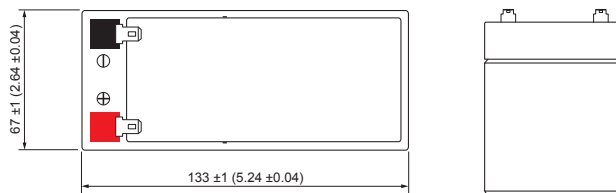
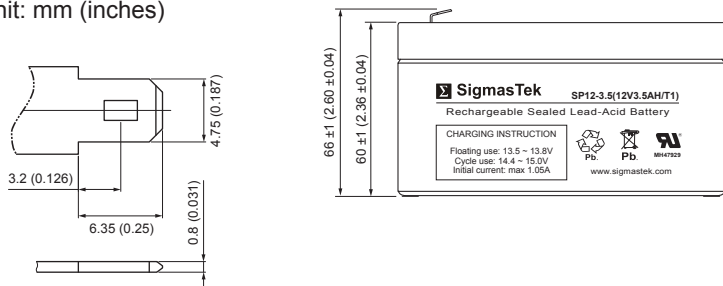
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	22.4	15.6	11.9	7.34	4.13	2.42	1.88	1.25	0.828	0.691	0.361
1.65V	20.8	14.7	11.3	7.00	4.11	2.34	1.84	1.21	0.822	0.685	0.360
1.70V	19.1	13.8	10.7	6.69	4.05	2.32	1.77	1.18	0.811	0.672	0.355
1.75V	17.9	12.9	10.2	6.46	3.94	2.26	1.72	1.16	0.801	0.660	0.349
1.80V	16.2	11.9	9.40	6.28	3.78	2.19	1.70	1.13	0.789	0.643	0.346
1.85V	12.2	9.50	7.91	5.40	3.40	2.02	1.59	1.06	0.746	0.625	0.343

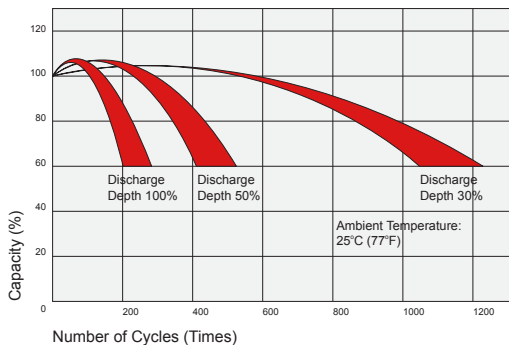
Dimensions

T1 Terminal

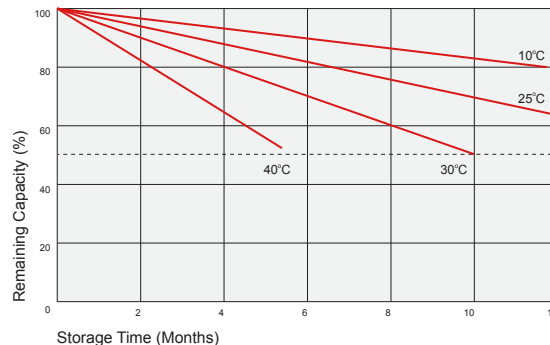
Unit: mm (inches)



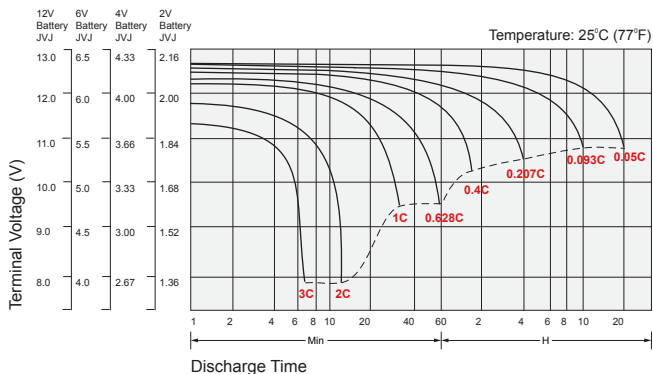
Cycle Service Life



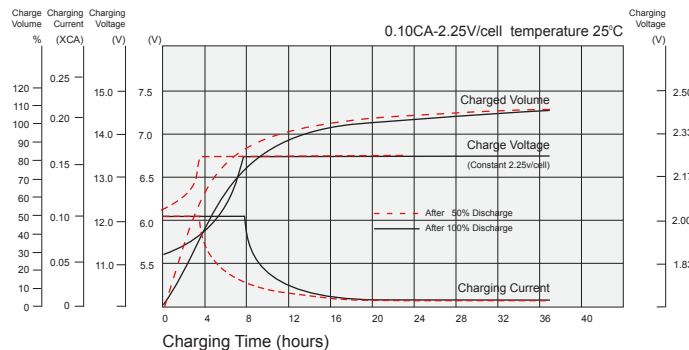
Self Discharge Characteristics



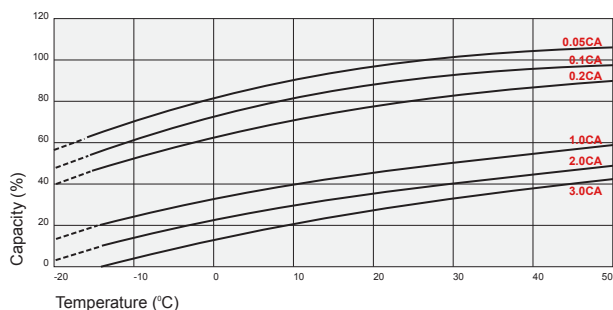
Discharge Characteristics



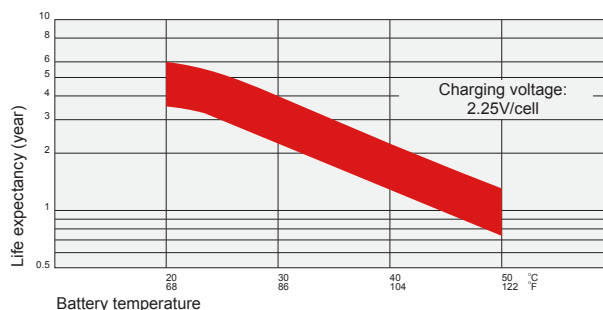
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



Contact Information

SigmatTek
7651 W 100th Place
Bridgeview, IL 60455, USA

T: (888) 988-8290
www.sigmastek.com
order@sigmastek.com