

Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	100AH	
Dimension	Length	305mm (12.00 inches)
	Width	168mm (6.60 inches)
	Height	207mm (8.15 inches)
	Total Height (with Terminal)	220mm (8.66 inches)
	Approximate Weight	29.00 kg (63.93 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	IT / NB	
Rated Capacity	105.8AH	(20hr, 1.75V/cell, 25°C/77°F)
	101.0AH	(10hr, 1.75V/cell, 25°C/77°F)
	88.0AH	(5hr, 1.75V/cell, 25°C/77°F)
	82.8AH	(3hr, 1.60V/cell, 25°C/77°F)
	65.1AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1200A	
Internal Resistance	4.9mΩ	
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	405.6	254.4	197.2	115.8	65.1	37.5	27.6	18.6	12.7	10.5	5.45
1.65V	356.4	232.2	185.6	110.0	63.0	36.3	26.7	18.3	12.6	10.3	5.40
1.70V	318.0	214.8	174.4	104.6	60.4	35.3	26.0	17.9	12.4	10.2	5.34
1.75V	278.4	197.4	162.0	99.00	58.0	34.4	25.4	17.6	12.2	10.1	5.29
1.80V	246.0	180.0	150.8	94.20	55.9	33.1	24.6	17.2	12.0	10.0	5.20
1.85V	208.8	161.4	136.4	88.40	53.0	31.3	23.5	16.4	11.6	9.65	5.13

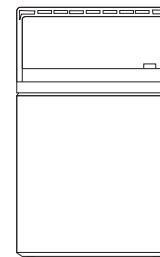
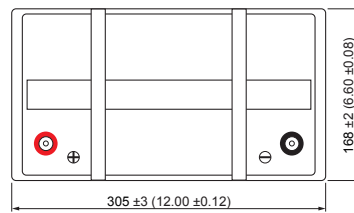
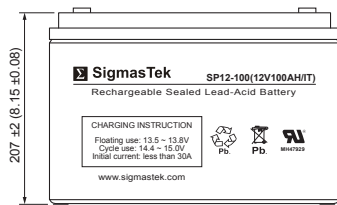
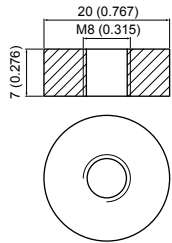
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	672.4	432.4	345.1	211.1	122.4	71.1	52.7	35.9	24.8	20.5	10.73
1.65V	604.8	403.9	330.2	201.9	119.1	69.2	51.3	35.3	24.6	20.3	10.64
1.70V	547.4	377.1	312.7	193.6	115.0	67.6	50.1	34.8	24.3	20.1	10.54
1.75V	492.9	354.6	294.6	184.3	110.8	66.0	49.1	34.3	24.0	19.9	10.45
1.80V	445.0	328.6	277.6	176.8	107.2	63.8	47.7	33.6	23.7	19.8	10.29
1.85V	381.8	298.1	254.5	168.5	102.2	60.8	45.7	32.2	22.9	19.1	10.15

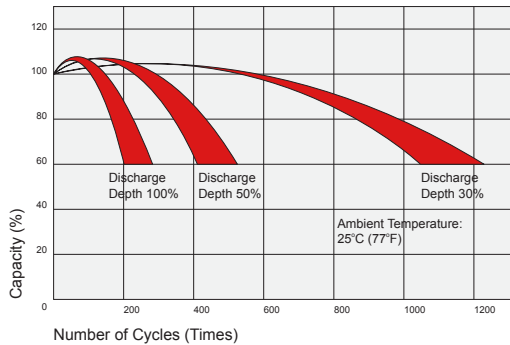
Dimensions

IT Terminal

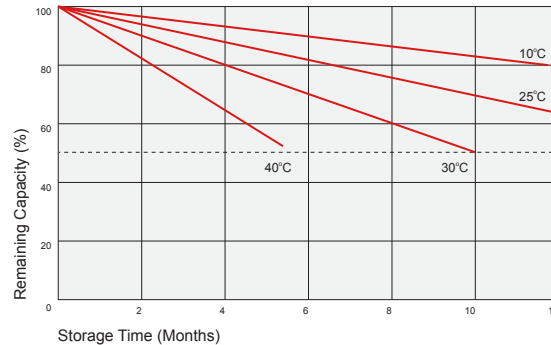
Unit: mm (inches)



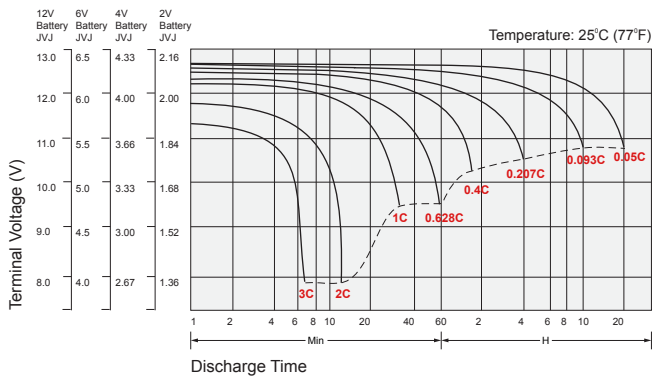
Cycle Service Life



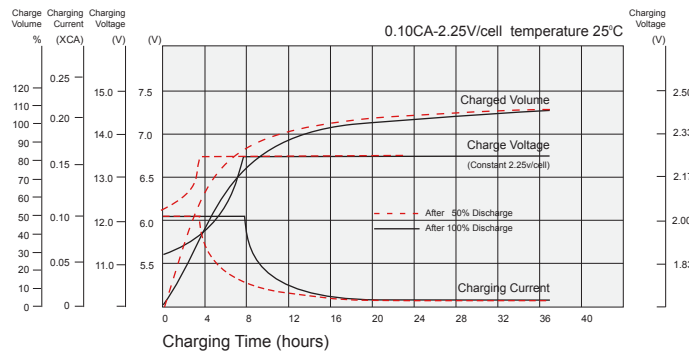
Self Discharge Characteristics



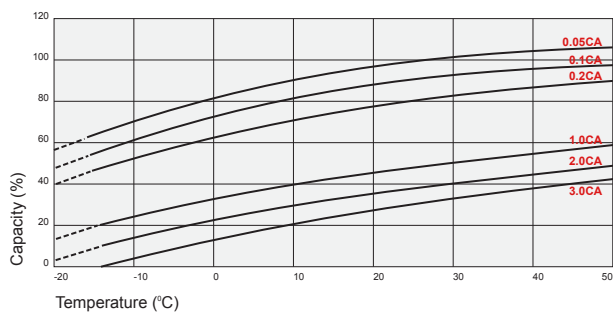
Discharge Characteristics



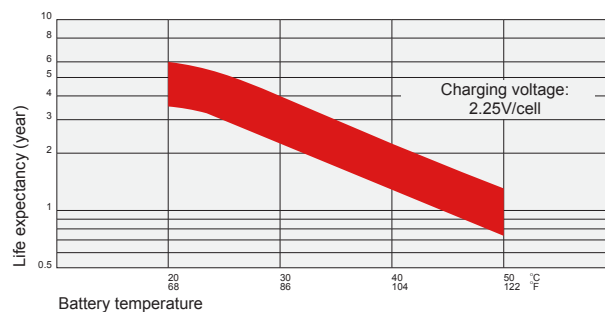
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



Contact Information

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

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