

Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	180AH	
Dimension	Length	532mm (20.9 inches)
	Width	207mm (8.15 inches)
	Height	214mm (8.42 inches)
	Total Height (with Terminal)	220mm (8.66 inches)
	Approximate Weight	52.8 kg (116.4 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	IT	
Rated Capacity	187.2AH	(20hr, 1.80V/cell, 25°C/77°F)
	180.0AH	(10hr, 1.80V/cell, 25°C/77°F)
	155.0AH	(5hr, 1.75V/cell, 25°C/77°F)
	140.4AH	(3hr, 1.75V/cell, 25°C/77°F)
	109.8AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1800A	
Internal Resistance	3.0mΩ	
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	10min	15min	30min	1h	2h	3h	5h	6h	8h	10h	20h
1.60V	434.3	330.0	194.4	109.8	67.6	51.7	33.8	28.8	22.3	18.9	9.81
1.65V	400.0	308.6	184.2	106.0	65.4	50.2	32.7	28.2	22.1	18.7	9.76
1.70V	370.6	290.2	174.6	102.6	63.6	48.2	31.8	27.6	21.8	18.4	9.63
1.75V	340.1	271.8	167.7	99.5	61.2	46.8	31.0	27.0	21.5	18.2	9.45
1.80V	309.5	248.9	161.6	95.1	59.0	46.0	30.2	26.3	21.1	18.0	9.36
1.85V	242.2	206.0	136.9	84.9	54.1	42.7	28.1	24.5	19.9	17.0	9.27

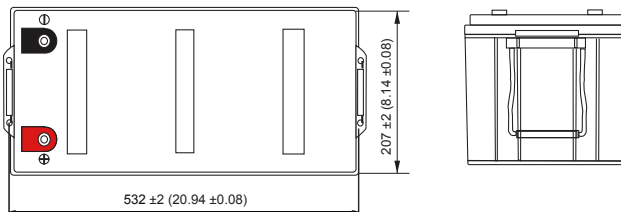
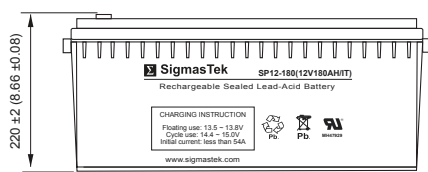
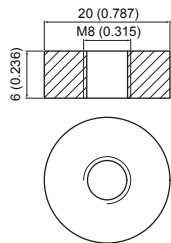
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	10min	15min	30min	1h	2h	3h	5h	6h	8h	10h	20h
1.60V	738.1	577.5	354.5	206.4	128.2	98.8	65.1	55.8	43.6	37.2	19.3
1.65V	695.8	549.0	338.1	200.4	124.7	96.3	63.2	54.7	43.3	36.9	19.2
1.70V	650.7	520.4	323.2	195.3	122.0	92.8	61.7	53.7	42.7	36.2	19.0
1.75V	610.8	494.3	312.2	189.9	117.6	90.4	60.3	52.7	42.1	35.9	18.7
1.80V	564.9	458.1	303.2	182.4	113.8	89.1	59.0	51.5	41.5	35.6	18.5
1.85V	447.4	384.3	261.0	163.7	105.0	83.3	55.2	48.2	39.3	33.6	18.4

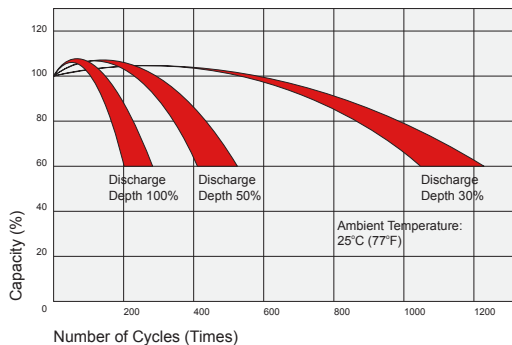
Dimensions

IT Terminal

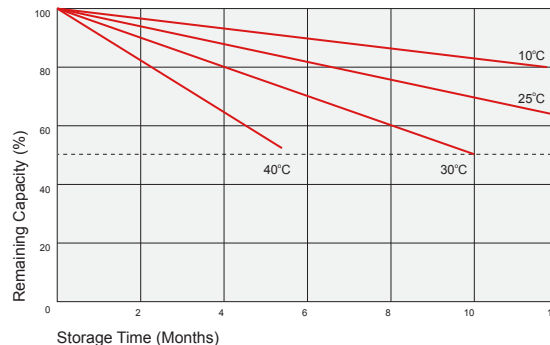
Unit: mm (inches)



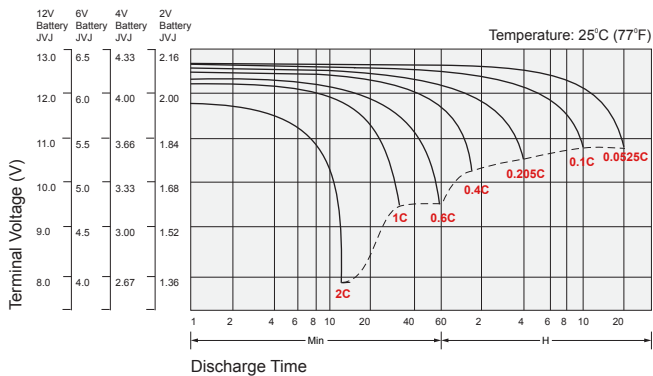
Cycle Service Life



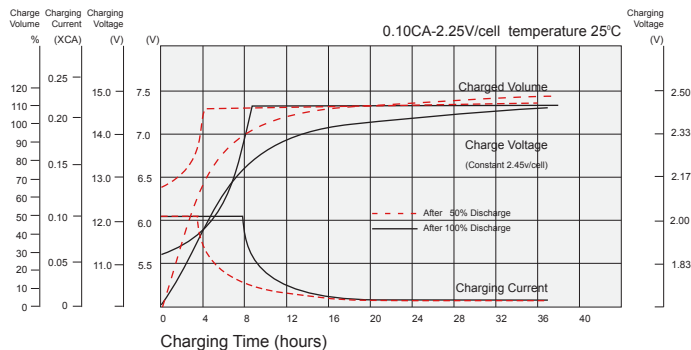
Self Discharge Characteristics



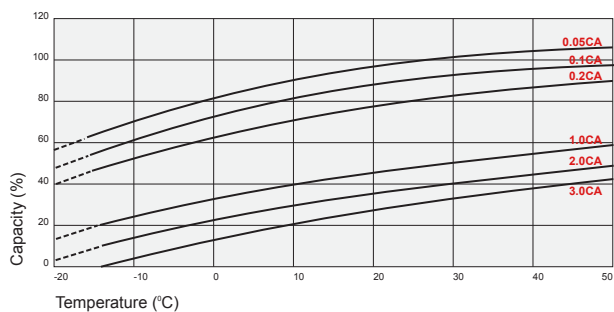
Discharge Characteristics



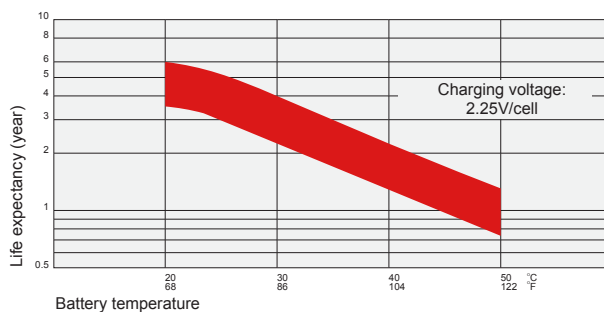
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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