

### Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	55AH	
Dimension	Length	230mm (9.04 inches)
	Width	138mm (5.45 inches)
	Height	207mm (8.15 inches)
	Total Height (with Terminal)	228mm (8.98 inches)
	Approximate Weight	17.0 kg (37.5 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	NB / IT	
Rated Capacity	57.8AH	(20hr, 1.75V/cell, 25°C/77°F)
	55.6AH	(10hr, 1.75V/cell, 25°C/77°F)
	47.3AH	(5hr, 1.75V/cell, 25°C/77°F)
	47.4AH	(3hr, 1.60V/cell, 25°C/77°F)
	33.6AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	660A	
Internal Resistance	7.5mΩ	
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	190.8	132.7	100.8	59.4	33.6	20.7	15.8	10.3	6.82	5.79	3.00
1.65V	173.0	122.2	94.30	56.3	32.4	20.0	15.3	9.98	6.75	5.73	2.98
1.70V	156.9	113.3	88.70	53.3	31.3	19.4	14.7	9.71	6.65	5.61	2.94
1.75V	142.5	103.9	83.10	51.3	30.4	18.7	14.3	9.46	6.56	5.56	2.89
1.80V	126.4	94.60	76.00	49.4	29.0	18.0	14.1	9.32	6.45	5.50	2.86
1.85V	94.10	74.00	62.90	41.8	25.9	16.5	13.1	8.60	6.08	5.19	2.83

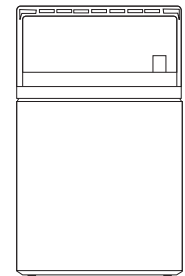
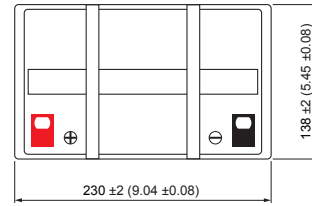
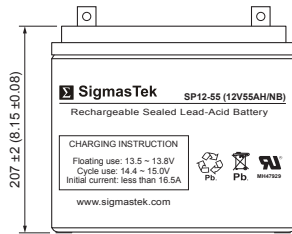
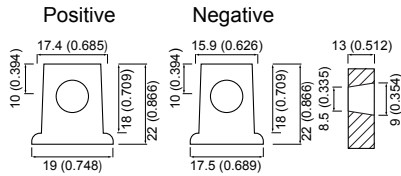
### Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	316.3	225.5	176.5	108.3	63.1	39.2	30.2	19.9	13.3	11.4	5.90
1.65V	293.6	212.6	167.8	103.3	61.2	38.1	29.4	19.3	13.2	11.3	5.58
1.70V	270.0	198.8	159.0	98.70	59.7	37.3	28.4	18.9	13.0	11.1	5.81
1.75V	252.2	186.6	151.0	95.40	58.0	35.9	27.6	18.4	12.9	11.0	5.70
1.80V	228.6	172.6	140.0	92.70	55.7	34.8	27.2	18.0	12.7	10.9	5.66
1.85V	172.1	136.7	117.4	79.70	50.0	32.1	25.5	16.9	12.0	10.3	5.61

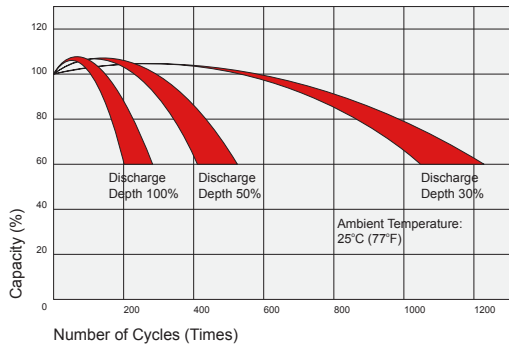
## Dimensions

### NB Terminal

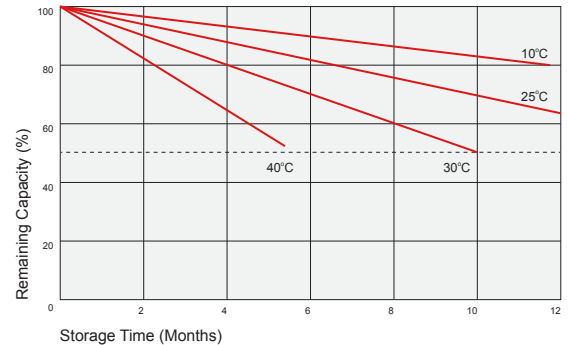
Unit: mm (inches)



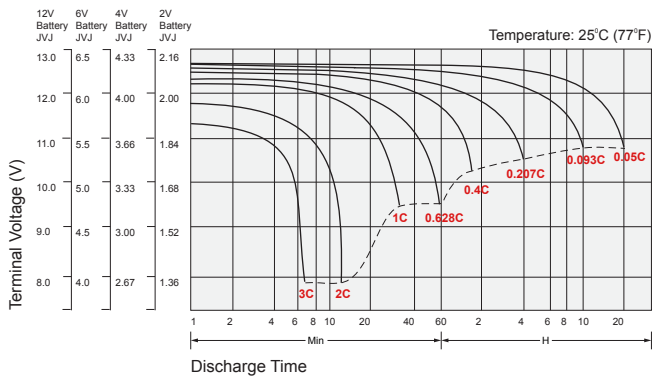
## Cycle Service Life



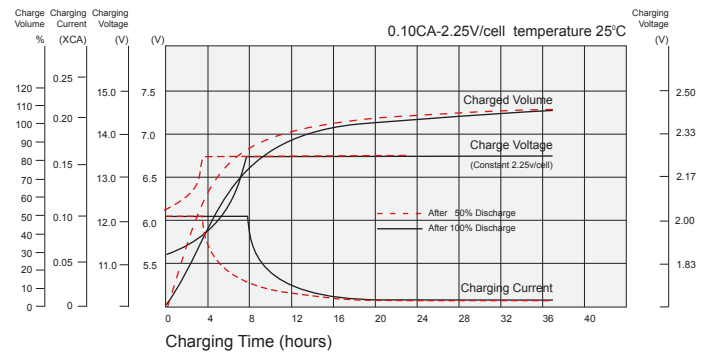
## Self Discharge Characteristics



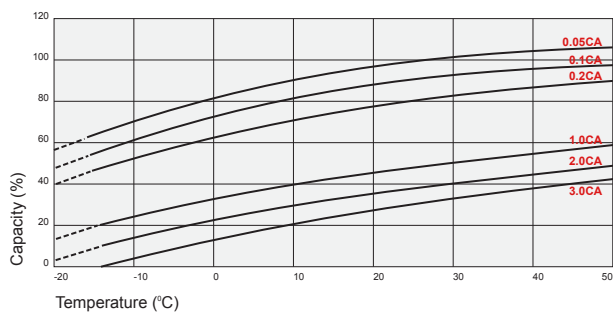
## Discharge Characteristics



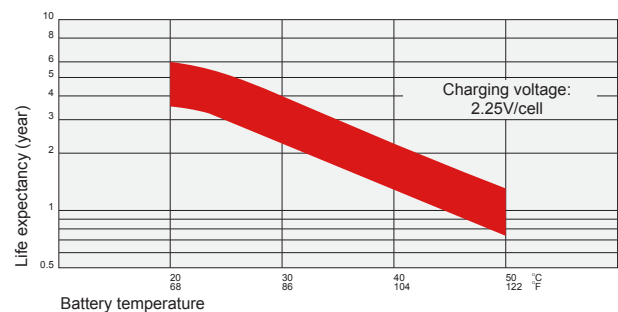
## Float Charging Characteristics



## 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