

### Specifications

Nominal Voltage	12V	
Nominal Capacity (20HR)	31AH	
Dimension	Length	195mm (7.68 inches)
	Width	130mm (5.12 inches)
	Height	164mm (6.46 inches)
	Total Height (with Terminal)	178mm (7.00 inches)
	Approximate Weight	10.7 kg (23.6 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, Gel Design	
Terminal Type	NB / IT	
Rated Capacity	30.6AH	(20hr, 1.75V/cell, 25°C/77°F)
	27.0AH	(10hr, 1.75V/cell, 25°C/77°F)
	24.0AH	(5hr, 1.75V/cell, 25°C/77°F)
	23.3AH	(3hr, 1.60V/cell, 25°C/77°F)
	18.2AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	300A	
Internal Resistance	14.6mΩ	
Operating Temp. Range	Discharge:	-20°C (-4°F)~55°C (131°F)
	Charge:	0°C (32°F)~40°C (104°F)
	Storage:	-20°C (-4°F)~50°C (122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Container Material	ABS (Option: 94-HB & 94-V0 flame retardant case) 103%	
Capacity affected by Temperature	40°C (104°F)	100%
	25°C (77°F)	86%
	0°C (32°F)	
Self Discharge	SigmasTek SPG series batteries may be stored for up to 9 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	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	39.7	29.2	21.4	18.2	10.5	7.78	6.21	5.21	3.49	2.85	1.59
1.67V	36.6	27.2	19.9	17.1	10.1	7.48	5.99	5.05	3.43	2.80	1.56
1.70V	35.2	26.2	19.2	16.5	9.81	7.25	5.84	4.95	3.38	2.76	1.55
1.75V	32.7	24.5	18.1	15.6	9.26	6.96	5.66	4.80	3.28	2.70	1.53
1.80V	29.1	22.3	16.8	14.6	8.73	6.59	5.40	4.62	3.18	2.65	1.50
1.85V	25.4	19.9	15.2	13.2	8.07	6.15	5.09	4.40	3.03	2.53	1.44

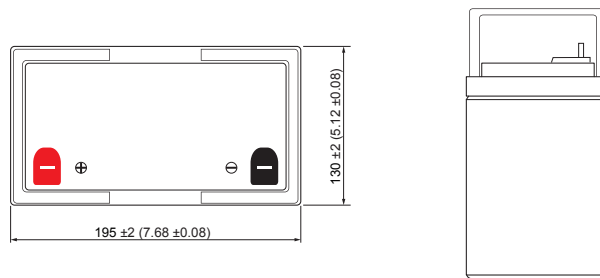
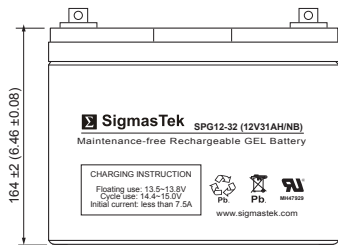
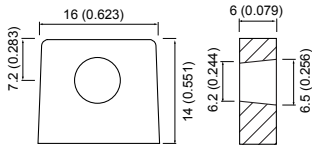
### Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	71.7	53.6	40.0	34.4	20.0	15.0	12.0	10.1	6.86	5.64	3.15
1.67V	66.9	50.5	37.5	32.6	19.3	14.5	11.6	9.85	6.76	5.54	3.11
1.70V	65.0	49.2	36.5	31.6	18.9	14.1	11.4	9.68	6.67	5.49	3.08
1.75V	61.0	46.3	34.6	30.0	17.9	13.6	11.0	9.41	6.49	5.37	3.05
1.80V	54.9	42.5	32.3	28.2	17.0	12.9	10.6	9.09	6.30	5.27	2.99
1.85V	48.6	38.4	29.5	25.7	15.8	12.0	10.0	8.68	6.03	5.05	2.87

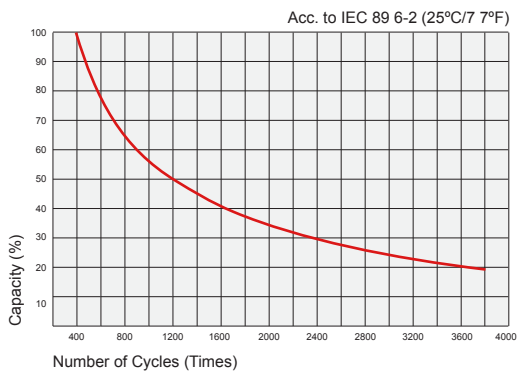
## Dimensions

### NB Terminal

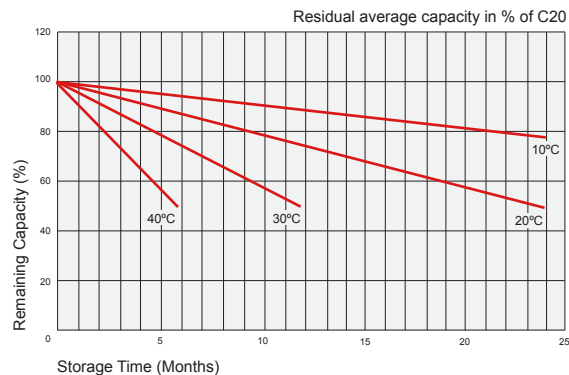
Unit: mm (inches)



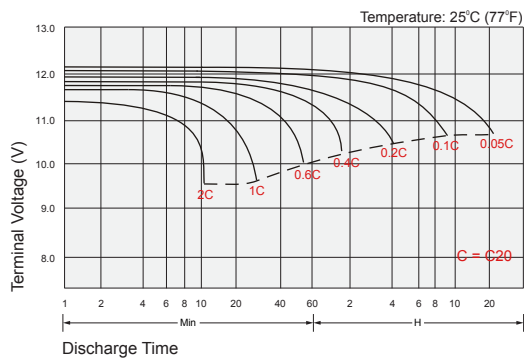
## Cycle Service Life



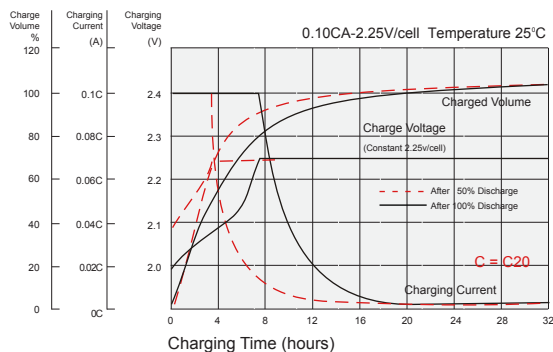
## Self Discharge Characteristics



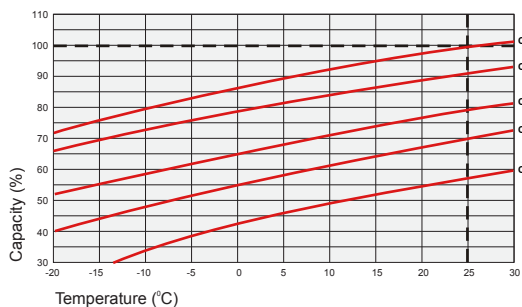
## Discharge Characteristics



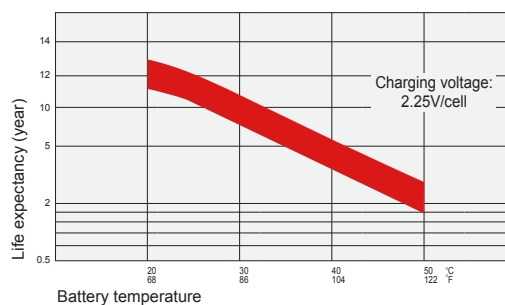
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Temperature Effects on Long Term Float Life



## Contact Information

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