

Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	87AH	
Dimension	Length	305mm (12.01 inches)
	Width	168mm (6.61 inches)
	Height	207mm (8.15 inches)
	Total Height (with Terminal)	213mm (8.38 inches)
	Approximate Weight	26.7 kg (59.8 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, Gel Design	
Terminal Type	IT / NB	
Rated Capacity	86.8AH	(20hr, 1.75V/cell, 25°C/77°F)
	78.0AH	(10hr, 1.75V/cell, 25°C/77°F)
	68.0AH	(5hr, 1.75V/cell, 25°C/77°F)
	66.0AH	(1C, 1.60V/cell, 25°C/77°F)
	49.6AH	(3C, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	850A	
Internal Resistance	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)	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
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	112.5	82.6	60.6	49.6	29.7	22.0	17.6	14.8	9.88	8.23	4.50
1.67V	103.8	77.2	56.4	46.8	28.5	21.2	17.0	14.3	9.71	8.07	4.43
1.70V	99.70	74.3	54.5	45.1	27.8	20.5	16.6	14.0	9.56	7.98	4.39
1.75V	92.60	69.4	51.3	42.6	26.2	19.7	16.0	13.6	9.29	7.80	4.34
1.80V	82.40	63.1	47.5	39.8	24.7	18.7	15.3	13.1	9.00	7.64	4.25
1.85V	71.90	56.4	43.1	36.0	22.9	17.4	14.4	12.5	8.59	7.32	4.08

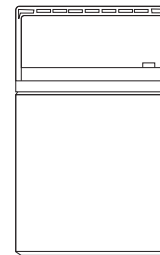
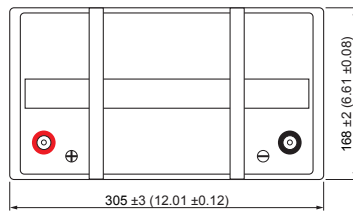
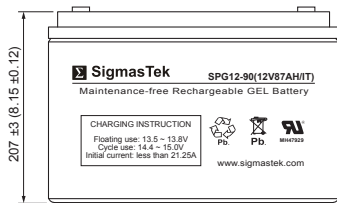
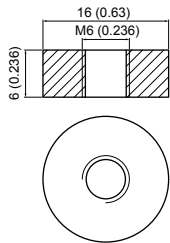
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	203.2	151.9	113.4	94.1	56.7	42.4	34.1	28.7	19.4	16.3	8.92
1.67V	189.6	143.2	106.3	89.1	54.8	41.0	32.9	27.9	19.2	16.0	8.81
1.70V	184.3	139.3	103.4	86.3	53.6	39.9	32.2	27.4	18.9	15.8	8.73
1.75V	172.9	131.2	98.10	82.1	50.8	38.4	31.3	26.7	18.4	15.5	8.63
1.80V	155.6	120.4	91.40	77.1	48.1	36.4	30.0	25.7	17.9	15.2	8.47
1.85V	137.6	108.8	83.50	70.2	44.7	34.1	28.4	24.6	17.1	14.6	8.14

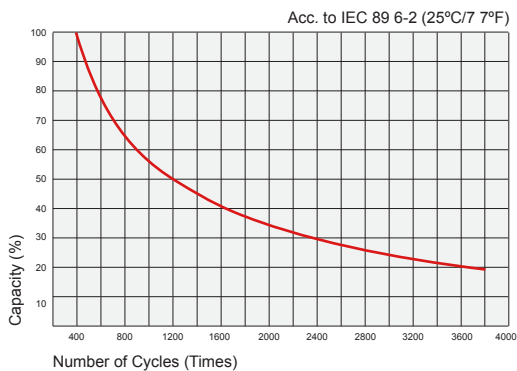
Dimensions

IT Terminal

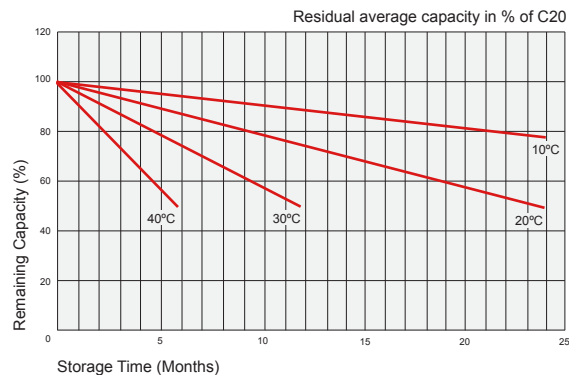
Unit: mm (inches)



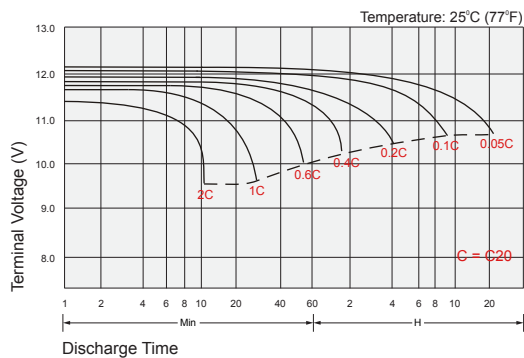
Cycle Service Life



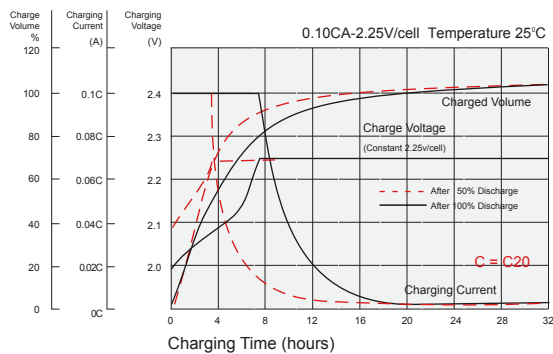
Self Discharge Characteristics



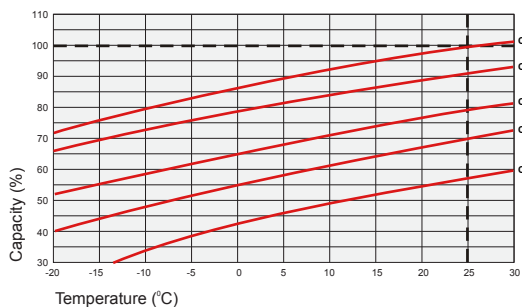
Discharge Characteristics



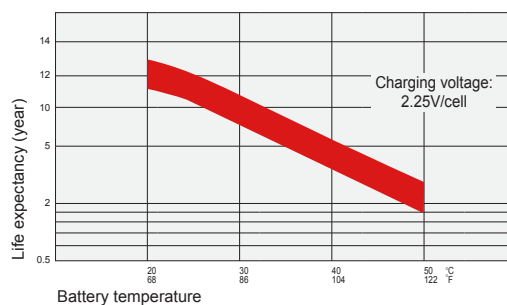
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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