

Specifications

Nominal Voltage	12V	
Nominal Capacity (8HR)	90AH	
Dimension	Length	394mm (15.5 inches)
	Width	110mm (4.33 inches)
	Height	285mm (11.2 inches)
	Total Height (with Terminal)	285mm (11.2 inches)
	Approximate Weight	32.6 kg (71.9 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	IT	
Rated Capacity	99.0AH	(20hr, 1.80V/cell, 25°C/77°F)
	93.4AH	(10hr, 1.80V/cell, 25°C/77°F)
	90.0AH	(8hr, 1.80V/cell, 25°C/77°F)
	85.0AH	(5hr, 1.75V/cell, 25°C/77°F)
	62.3AH	(1hr, 1.67V/cell, 25°C/77°F)
Max. Discharge Current	900A	
Internal Resistance	4.5mΩ	
Operating Temp. Range	Discharge:	-15°C (5°F)~50°C (122°F)
	Charge:	0°C (32°F)~40°C (104°F)
	Storage:	-15°C (5°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 SPF 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

- Standard 19 & 23 inch power cabinets
- Solar power stations
- Network communication equipment
- UPS and standby power supply
- Power station systems
- Railway and marine systems



Constant Current Discharge (Amperes Per Battery) at 25°C (77°F)

Discharge Time F.V. (V/cell)	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	226.6	176.4	146.7	107.9	80.2	63.9	36.7	26.6	21.3	17.7	15.3	11.97	9.81	5.11
1.67V	215.6	169.9	140.4	105.3	78.1	62.3	36.1	26.1	20.9	17.3	15.0	11.70	9.63	5.09
1.70V	208.3	165.8	137.6	103.9	77.8	62.0	36.0	26.0	20.7	17.1	14.9	11.55	9.54	5.06
1.75V	194.7	157.4	132.3	101.0	76.1	61.2	35.5	25.7	20.6	17.0	14.7	11.39	9.45	5.02
1.80V	177.5	145.4	123.9	96.10	73.3	59.1	34.8	25.3	20.1	16.6	14.4	11.25	9.34	4.95
1.85V	156.5	130.5	112.0	87.80	68.1	55.4	33.0	23.8	19.1	15.8	13.7	10.71	8.93	4.73

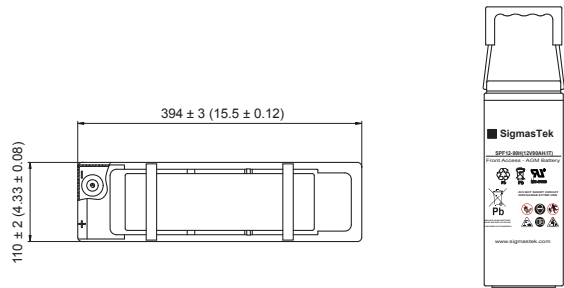
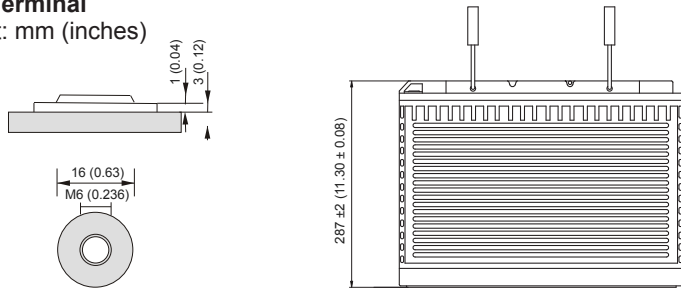
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

Discharge Time F.V. (V/cell)	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	389.7	312.2	265.9	198.9	150.3	121.4	70.4	51.4	41.4	34.5	29.9	23.6	19.5	10.17
1.67V	381.3	306.7	258.1	196.5	148.1	119.5	69.9	50.7	40.8	33.8	29.5	23.2	19.2	10.13
1.70V	369.9	300.5	253.9	194.5	148.0	119.3	69.7	50.5	40.5	33.5	29.2	22.9	19.0	10.09
1.75V	353.7	289.3	245.9	190.0	145.2	118.1	68.9	50.1	40.3	33.4	28.9	22.6	18.8	10.02
1.80V	327.5	270.6	232.7	182.3	141.2	114.6	67.9	49.5	39.5	32.8	28.6	22.4	18.6	9.890
1.85V	292.3	246.1	213.3	169.1	132.3	107.9	64.8	46.8	37.7	31.3	27.3	21.4	17.9	9.470

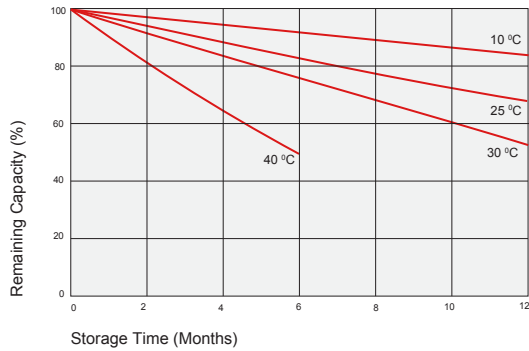
Dimensions

IT Terminal

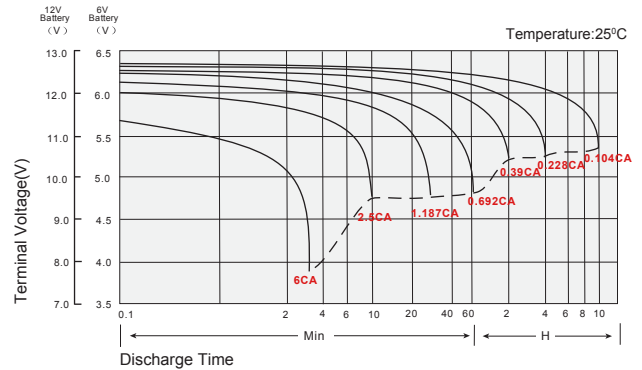
Unit: mm (inches)



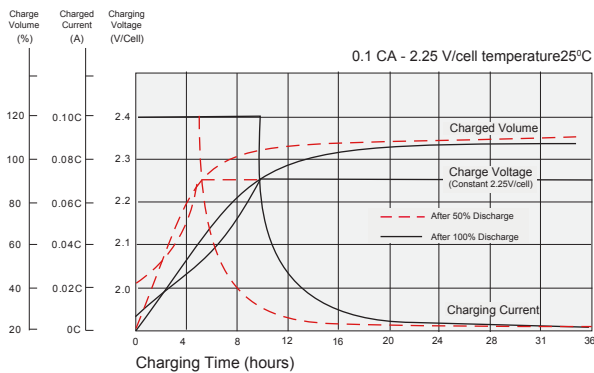
Self Discharge Characteristics



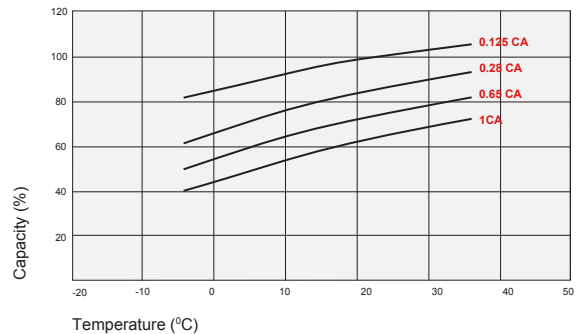
Discharge Characteristics



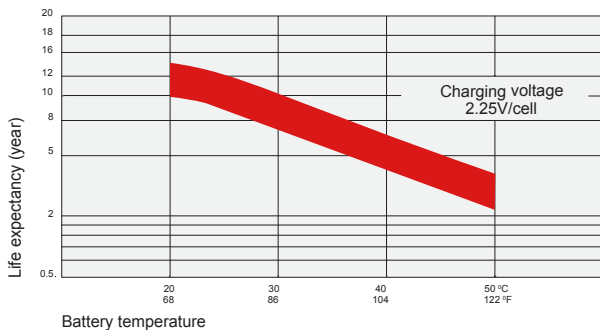
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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