

Specifications

Nominal Voltage	12V	
Nominal Capacity (20HR)	28AH	
Dimension	Length	167mm (6.56 inches)
	Width	125mm (4.92 inches)
	Height	177mm (6.97 inches)
	Total Height (with Terminal)	177mm (6.97 inches)
	Approximate Weight	9.5 kg (20.95 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	IT / NB	
Rated Capacity	28.2AH	(20hr, 1.75V/cell, 25°C/77°F)
	26.7AH	(10hr, 1.75V/cell, 25°C/77°F)
	23.8AH	(5hr, 1.75V/cell, 25°C/77°F)
	23.6AH	(3hr, 1.60V/cell, 25°C/77°F)
	17.6AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	420A	
Internal Resistance	14mΩ	
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	108.1	73.4	54.3	32.2	17.6	10.2	7.88	5.18	3.39	2.81	1.47
1.65V	98.00	67.6	50.8	30.5	17.4	9.80	7.65	5.01	3.36	2.78	1.46
1.70V	88.90	62.7	47.8	28.9	17.0	9.66	7.34	4.88	3.31	2.73	1.44
1.75V	80.70	57.5	44.8	27.8	16.5	9.42	7.14	4.76	3.26	2.67	1.41
1.80V	71.60	52.3	41.0	26.8	15.8	9.09	7.01	4.64	3.21	2.60	1.40
1.85V	53.30	40.9	33.9	22.7	14.1	8.33	6.52	4.32	3.02	2.53	1.39

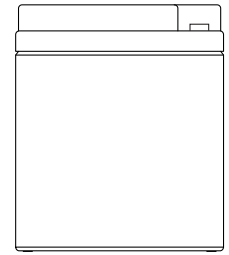
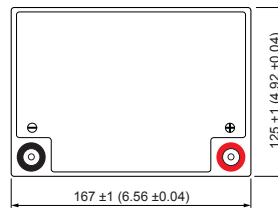
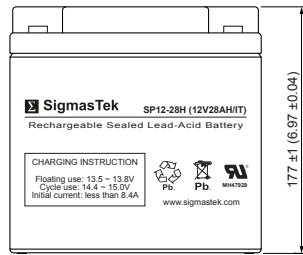
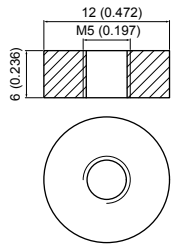
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	179.2	124.8	95.1	58.7	33.1	19.39	15.06	9.99	6.63	5.53	2.89
1.65V	166.3	117.6	90.4	56.0	32.9	18.68	14.68	9.70	6.58	5.48	2.88
1.70V	153.0	110.0	85.7	53.5	32.4	18.53	14.14	9.48	6.49	5.38	2.84
1.75V	142.9	103.3	81.4	51.7	31.5	18.11	13.78	9.26	6.41	5.28	2.79
1.80V	129.5	95.50	75.4	50.2	30.3	17.53	13.59	9.05	6.31	5.15	2.77
1.85V	97.50	75.60	63.3	43.2	27.2	16.17	12.70	8.47	5.97	5.00	2.75

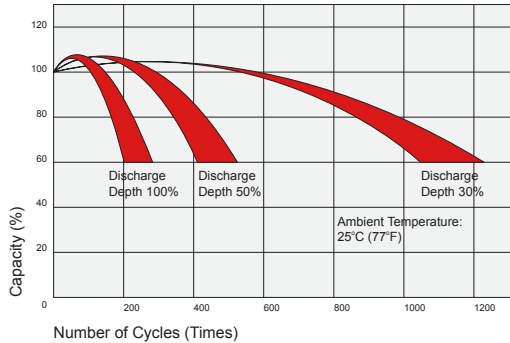
Dimensions

IT Terminal

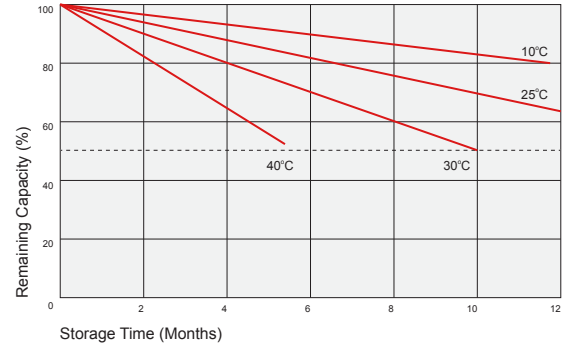
Unit: mm (inches)



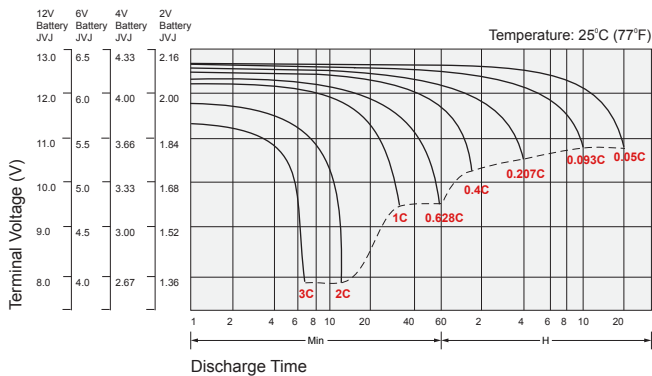
Cycle Service Life



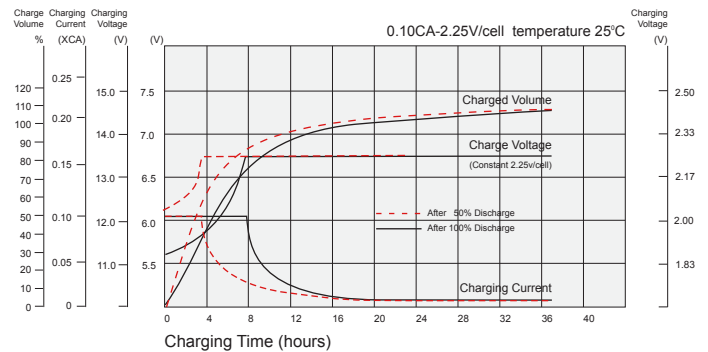
Self Discharge Characteristics



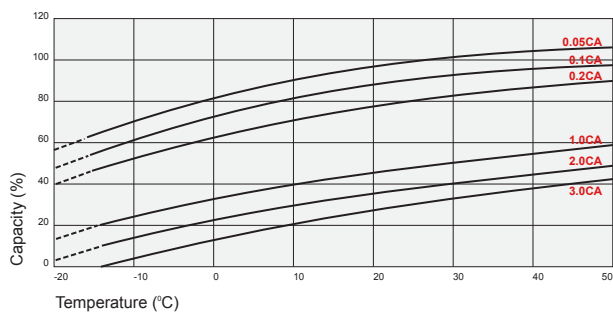
Discharge Characteristics



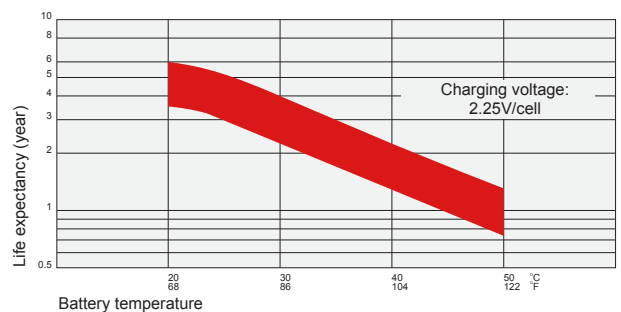
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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