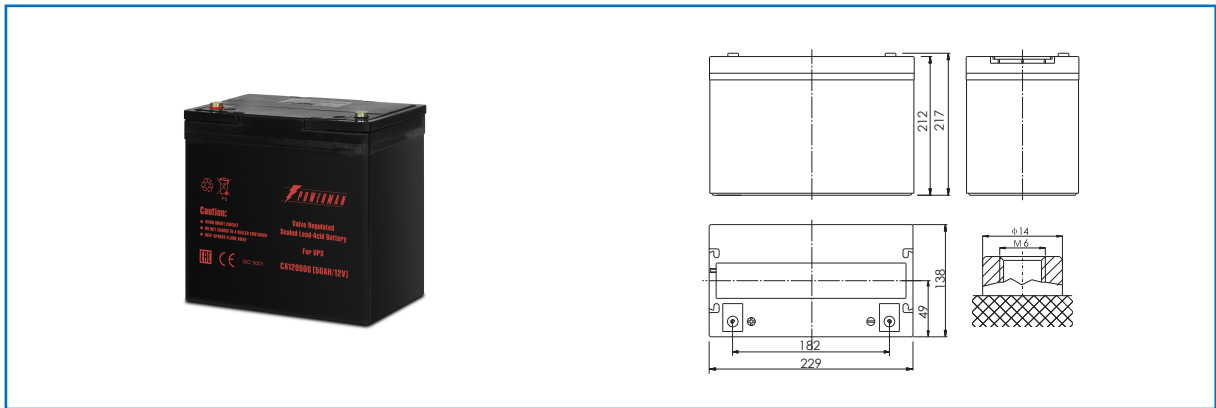


CA12500/UPS



Specifications

Nominal Voltage		12V
Rated Capacity(20 hour rate)		50Ah
Dimensions	Total Height (with terminals)	8.39inches (213mm)
	Height	8.19inches (208mm)
	Length	9.02inches (229mm)
	Width	5.43inches (138mm)
Weight		Approx. 35.64pound(16.2kg)

Characteristics

Capacity 77°F(25°C)	20 hour rate (2.5A)	50Ah
	10 hour rate (4.6A)	46Ah
	5 hour rate (8.0A)	40Ah
	1 hour rate (30A)	30Ah
	15 minute Rate (87.2A)	21.8Ah
Internal Resistance	Full charged Battery 77°F(25°C)	8.3mΩ
Capacity affected by Temperature (20 hour rate)	104°F(40°C)	102%
	77°F(25°C)	100%
	32°F(0°C)	85%
	5°F(-15°C)	65%
Self-Discharge 77°F(20°C)	Capacity after 3 month storage	91%
	Capacity after 6 month storage	81%
	Capacity after 12 month storage	60%
Max. Discharge Current 77°F(25°C)	500A(5S)	
Terminal	M1	
Charge (Constant Voltage)	Cycle	Initial Charging Current less than 15A
		Voltage 14.4~14.7V/77°F(25°C)
	Float	Voltage 13.5~13.8V/77°F(25°C)

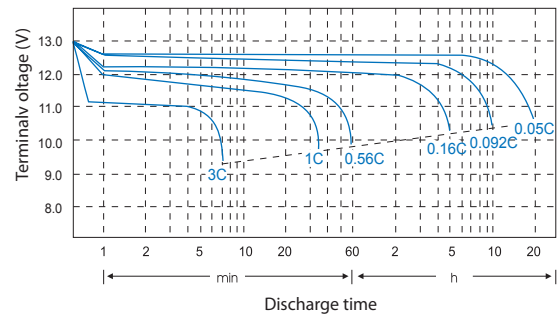
Constant Current Discharge (AMPERES @25°C)

F.V/Time	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1.65	108.5	84.0	51.0	40.1	27.10	18.90	13.05	8.75	6.20	4.90	4.21	2.17
1.70	102.5	78.5	43.4	37.9	25.95	18.45	12.50	8.45	5.95	4.80	4.08	2.13
1.80	86.5	68.5	39.2	35.8	24.70	17.65	11.80	8.00	5.60	4.60	3.97	2.09

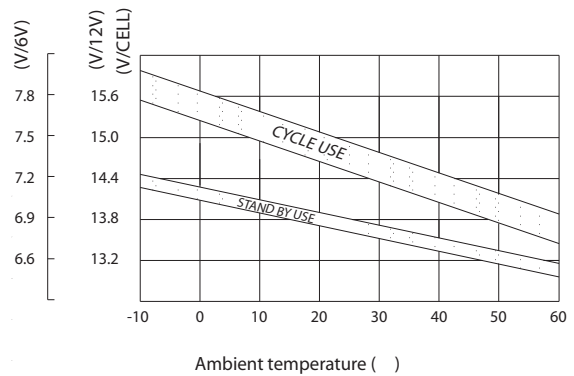
Constant Power Discharge (WATTS PER CELL@25°C)

F.V/Time	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1·60	223	173	103	79.8	64.5	38.4	27.2	17.6	10.9	9.1	7.92	4.15
1.65	210	165	101	78.6	63.0	37.6	26.6	17.3	10.9	9.1	7.92	4.15
1·67	204	160	101	77.9	62.2	37.2	26.4	17.1	10.9	9.1	7.92	4.15
1·70	199	157	100	77.0	61.5	36.9	26.1	17.0	10.9	9.1	7.92	4.15
1·75	187	151	98	75.3	60.2	35.8	25.5	16.8	10.8	9.0	7.85	4.15
1·80	174	144	97	73.3	58.6	34.8	24.9	16.6	10.7	8.9	7.61	4.07
1·85	144	121	78	66.9	56.4	33.7	24.2	15.5	10.6	8.4	7.29	3.84

Discharge Curves 77°F(25°C)



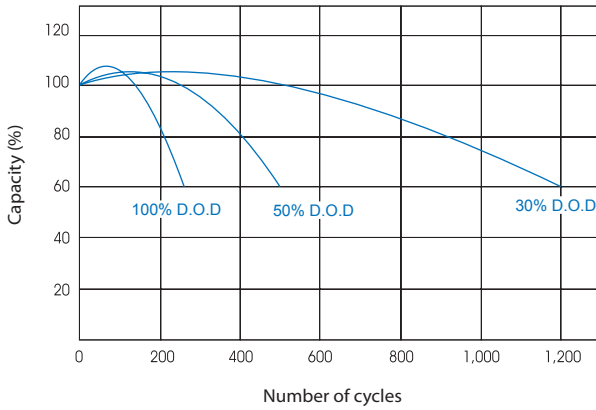
Relationship between charge voltage and temperature



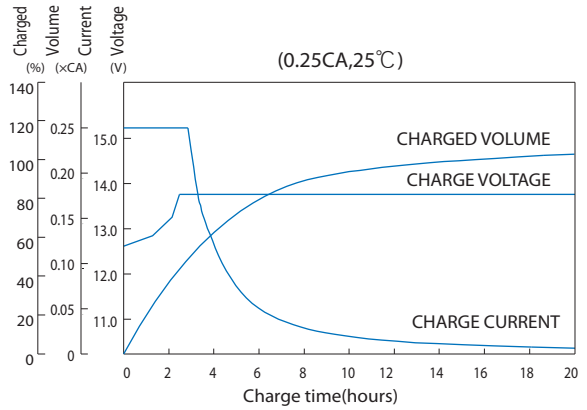
CA12500/UPS

The operating environment temperature above 40°C should be avoided. After long term storage, The battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles. To get the longest life, POWERMAN battery should be fully charged before storage.

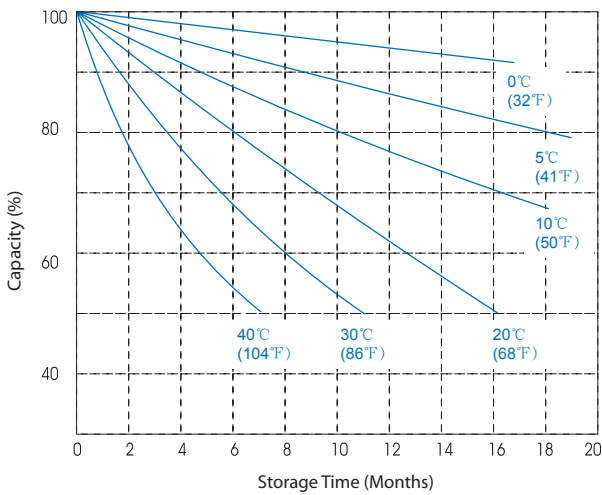
Cycle service life in relation to depth of discharge



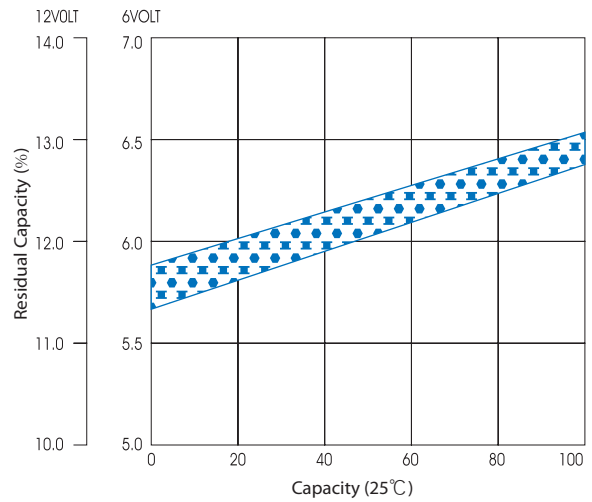
Constant voltage charge characteristic



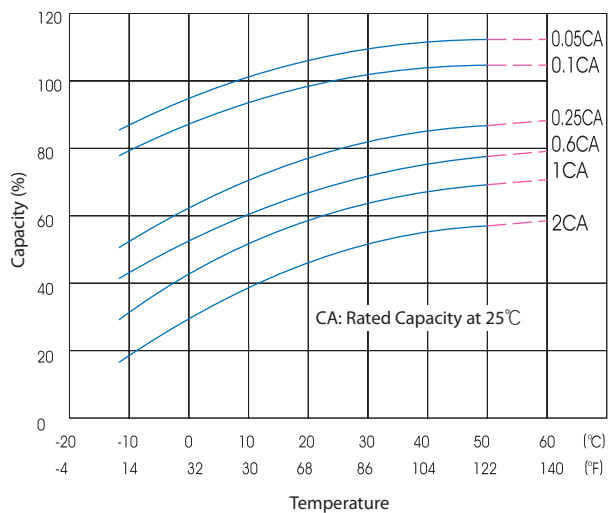
Self-Discharge Characteristics



Relationship of OCV and Residual Capacity % (25°C)



Temperature effects on capacity



Temperature effects float life

