

Specifications

Nominal Voltage	12V	
Rated Capacity(20 hour rate)	120Ah	
Dimensions	Total Height (with terminals)	9.29inches (236mm)
	Height	8.19inches (208mm)
	Length	16.02inches (407mm)
	Width	6.85inches (174mm)
Weight	Approx.75.90pound(34.5kg)	

Characteristics

Capacity 77°F(25°C)	20 hour rate (6.0A)	120Ah
	10 hour rate (11A)	110Ah
	5 hour rate (19.2A)	96Ah
	1 hour rate (72A)	72Ah
	15 minute Rate(196.8A)	49.2Ah
Internal Resistance	Full charged Battery 77°F(25°C)	4.0 mΩ
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)	960A(5S)	
Terminal	M3	
Charge (Constant Voltage)	Cycle	Initial Charging Current less than 36A
		Voltage 14.4~14.7V/77°F(25°C)
	Float	Voltage 13.5~13.8V/77°F(25°C)

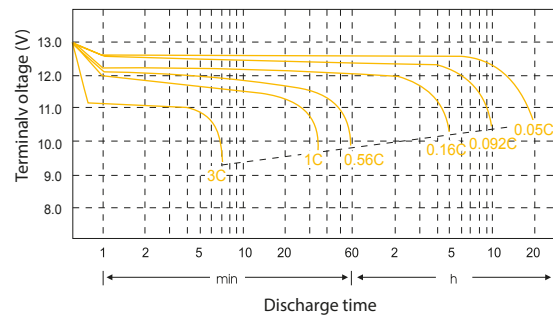
Constant Current Discharge (AMPERES @25°C)

F.V/Time	10Min	15Min	30Min	60Min	2H	3H	4H	5H	8H	10H	20H
1.60	271	197	127	76.1	44.2	31.5	24.8	21.2	14.6	11.8	6.22
1.65	261	189	122	73.2	42.5	31.2	24.5	21.0	14.5	11.7	6.16
1.70	246	182	104	73.1	41.9	30.0	23.6	20.3	14.1	11.5	6.11
1.75	215	172	97.9	72.0	41.7	29.4	22.9	19.2	13.9	11.0	6.00
1.80	207	165	94.1	69.2	40.1	28.3	22.0	18.5	13.4	10.6	5.77
1.85	170	144	86.6	63.7	38.5	26.9	20.9	17.6	12.7	10.1	5.48

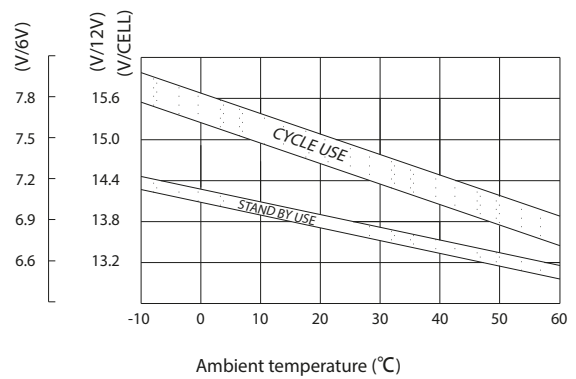
Constant Power Discharge (WATTS PER CELL @25°C)

F.V/Time	10Min	15Min	30Min	60Min	2H	3H	4H	5H	8H	10H	20H
1.60	473	368	229	143	84.0	58.9	46.5	38.9	27.5	22.0	11.7
1.65	467	365	222	138	82.9	58.8	46.3	38.6	27.4	21.8	11.7
1.70	455	349	194	133	82.1	57.2	45.2	37.9	26.8	21.7	11.6
1.75	415	329	187	130	81.5	55.7	44.1	37.2	26.0	21.6	11.6
1.80	396	317	181	128	79.9	55.3	43.7	36.6	25.7	21.2	11.6
1.85	328	277	169	125	77.0	54.0	42.5	35.4	24.1	20.3	11.0

Discharge Curves 77°F(25°C)

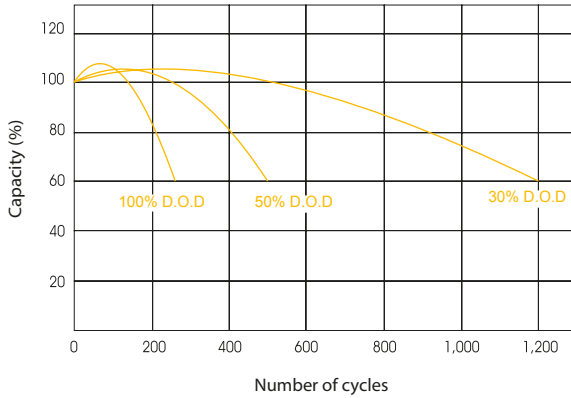


Relationship between charge voltage and temperature

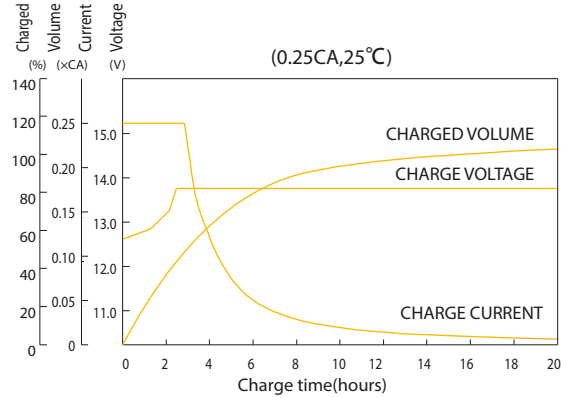


The operating environment temperature above 40°C should be avoided, After long term storage, The battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles. To get the longest life, ENSMART battery should be fully charged before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

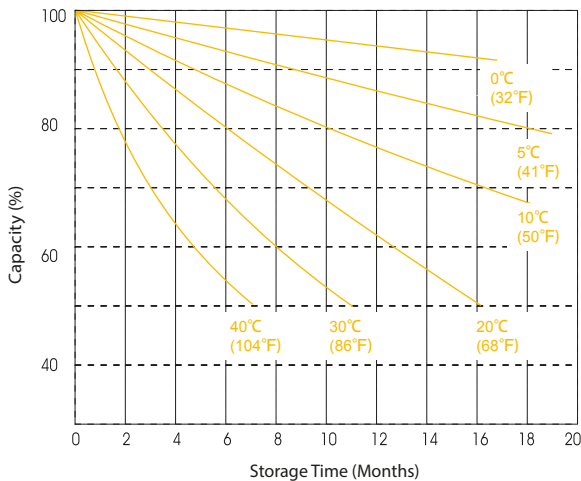
■ Cycle service life in relation to depth of discharge



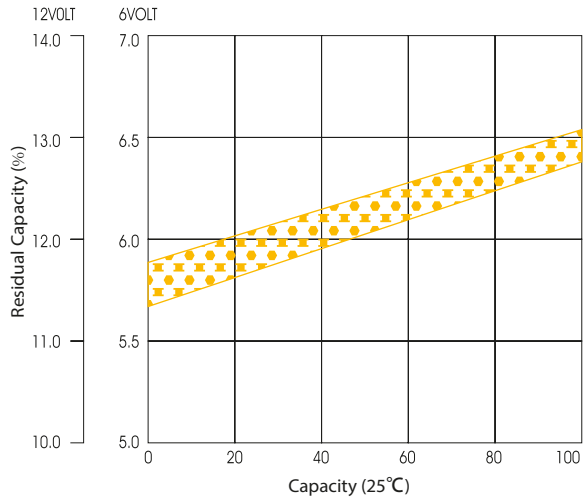
■ Constant voltage charge characteristic



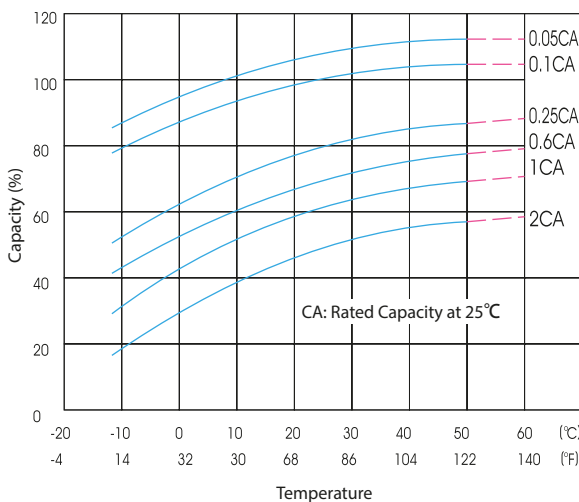
■ Self-Discharge Characteristics



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



■ Temperature effects on capacity



■ Temperature effects float life

