

**Specifications**

Nominal Voltage	12V	
Rated Capacity (20 hour rate)	200Ah	
Dimensions	Total Height (with terminals)	9.06 inches(230mm)
	Height	8.86 inches(225mm)
	length	20.59 inches(523mm)
	width	9.45 inches(240mm)
Weight	Approx. 128.7Pound(58.5kg)	

**Characteristics**

Capacity 77°F (25°C)	20 hour rate (10.0A)	200 Ah
	10 hour rate (18.4A)	184 Ah
	5 hour rate (32.0A)	160 Ah
	1hour rate (120.0A)	120 Ah
	15Minute Rate (328A)	82.0 Ah
Internal Resistance	Full charged Battery 77°F (25°C)	3.5mΩ
	104°F (40°C)	102%
Capacity affected by Temperature (20hour rate)	77°F (25°C)	100%
	32°F (0°C)	85%
	5°F (-15°C)	65%
Self-Discharge 77°F (25°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)	1333A(5S)	
Terminal	M3	
Charge (Constant Voltage)	Cycle	Initial Charging Current less than 60A
		Voltage 14.4~14.7V / 77°F (25°C)
	Float	Voltage 13.5~13.8V / 77°F (25°C)

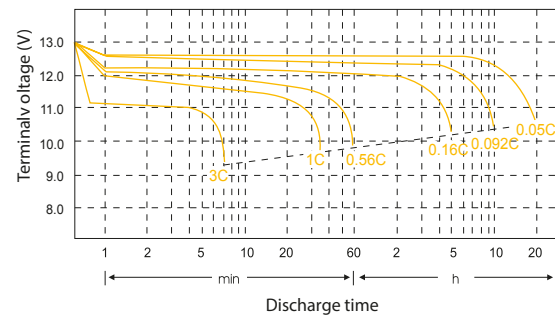
**Constant Current Discharge (AMPERES @25°C)**

F.V/Time	10Min	15Min	30Min	60Min	2H	3H	4H	5H	8H	10H	20H
1.60	401	328	197	127	73.1	52.0	40.7	34.5	23.8	19.4	10.4
1.65	386	315	189	122	70.3	51.5	40.3	34.2	23.5	19.2	10.3
1.70	364	286	177	121	69.2	50.0	39.2	33.5	23.0	18.6	10.1
1.75	317	254	152	120	68.8	49.9	38.5	32.0	22.7	18.4	10.0
1.80	305	244	146	115	66.2	48.0	37.0	30.8	21.8	17.7	9.62
1.85	250	212	134	106	63.6	45.6	35.2	29.3	20.7	16.8	9.14

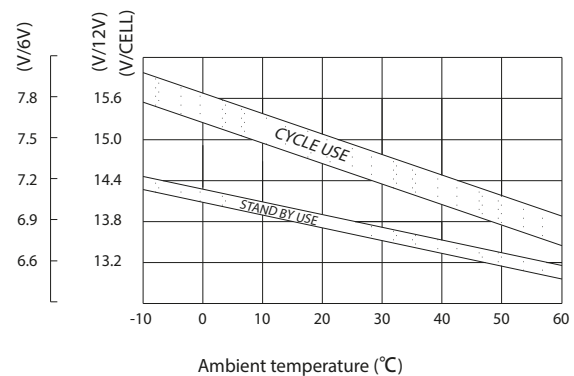
**Constant Power Discharge (WATTS PER CELL @25°C)**

F.V/Time	10Min	15Min	30Min	60Min	2H	3H	4H	5H	8H	10H	20H
1.60	697	545	349	231	138	95.8	75.5	63.2	43.5	37.3	19.0
1.65	691	541	343	228	136	94.6	74.9	63.0	43.3	36.8	18.7
1.70	672	529	331	219	134	93.2	74.0	62.6	43.0	36.0	18.5
1.75	629	499	296	216	133	92.8	73.5	62.0	42.5	35.1	18.4
1.80	584	469	281	211	130	92.1	72.9	61.4	41.7	34.4	18.1
1.85	485	410	257	207	124	89.3	69.6	57.2	38.9	32.8	17.8

**Discharge Curves 77°F(25°C)**

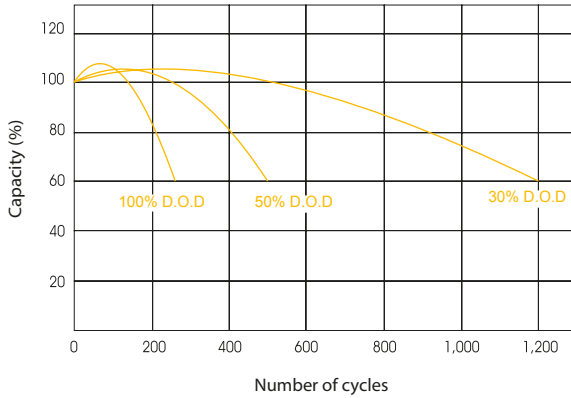


**Relationship between charge voltage and temperature**

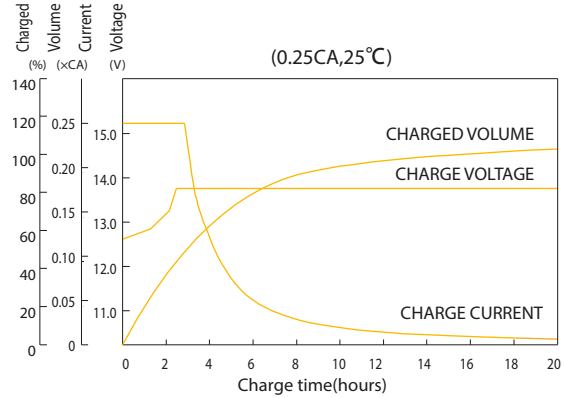


The operating environment temperature above 40°C should be avoided, After long term storage, The battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles. To get the longest life, ENSMART battery should be fully charged before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

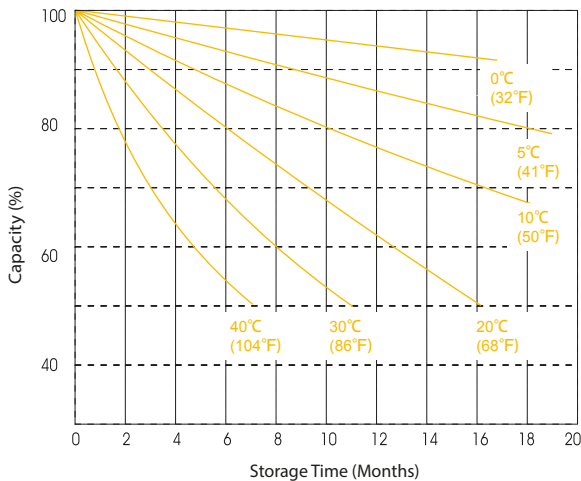
■ Cycle service life in relation to depth of discharge



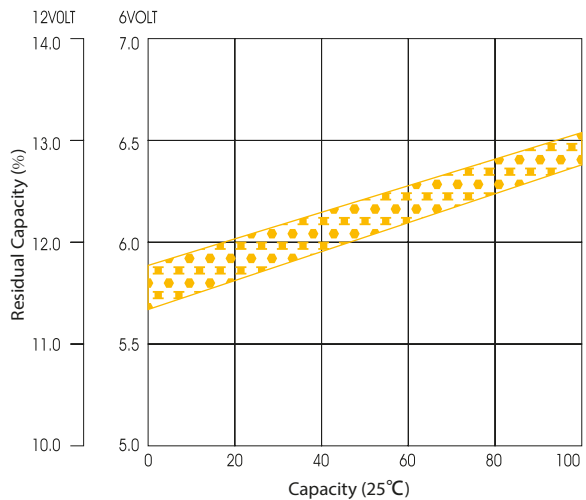
■ Constant voltage charge characteristic



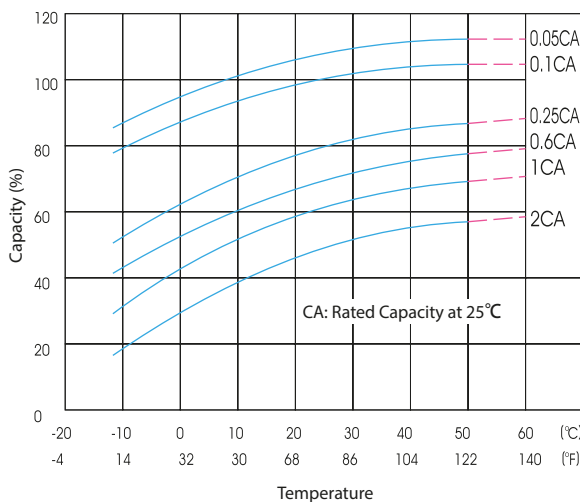
■ Self-Discharge Characteristics



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



■ Temperature effects on capacity



■ Temperature effects float life

