

SIN12-75A DC [12V 75AH]

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	75Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 22.5 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 7.0 mΩ
Terminal	F11(M6)
Max. Discharge Current	750A (5 sec)
Cold Cranking Ampere(CCA)	470A
Maxi. Charging Current	22.5A
Reference Capacity	C3 58.2AH C5 65.5AH C10 75.0AH C20 79.4AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	SINERGY Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

SINERGY
BATTERIES

DC (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment, V, telecom, broadband and cable TV, UPS systems etc. For general purpose applications, this is a battery with 6-8 years design life in float service.



ISO 9001



ISO 14001



OHSAS 18001

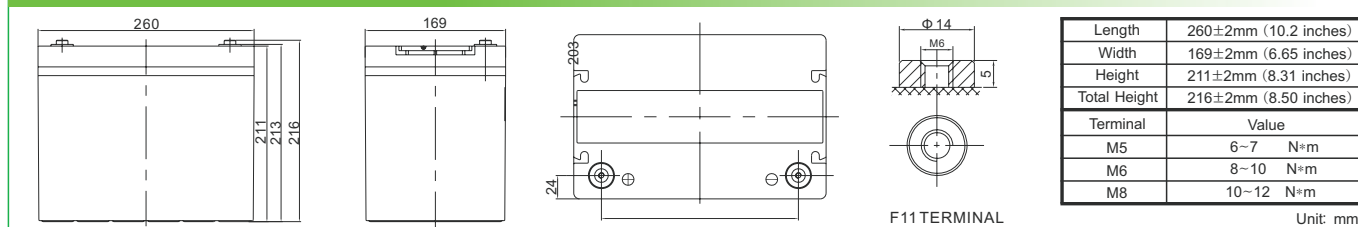


MH 28539



G4M20206-0910-E-16

Dimensions



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	190.4	143.2	83.8	46.3	27.3	21.2	16.6	14.2	9.52	7.91	4.14
1.65V	179.9	136.9	80.4	44.7	26.5	20.5	16.2	13.8	9.41	7.82	4.07
1.70V	165.6	128.3	76.9	43.2	25.6	20.0	15.8	13.4	9.27	7.70	4.02
1.75V	151.6	119.3	73.5	41.7	24.7	19.4	15.3	13.1	9.14	7.60	3.97
1.80V	137.2	110.2	70.2	40.1	23.8	18.8	14.9	12.8	8.98	7.50	3.94
1.85V	112.1	91.4	60.5	35.9	21.8	17.4	13.9	11.9	8.43	7.06	3.74

Constant Power Discharge Characteristics : WPC(25°C)

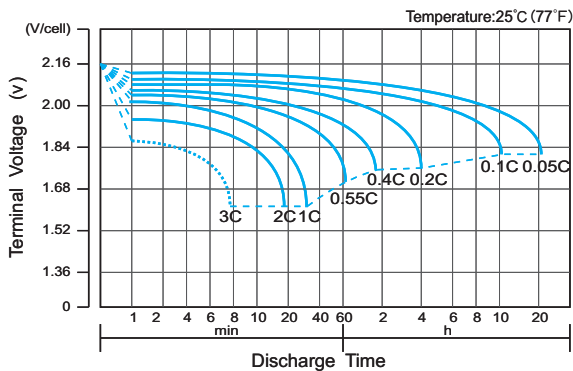
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	323.6	250.4	152.2	87.0	51.8	40.4	32.0	27.3	18.6	15.6	8.15
1.65V	311.7	242.9	147.6	84.5	50.4	39.4	31.2	26.7	18.4	15.4	8.03
1.70V	292.2	230.9	142.5	82.2	49.0	38.5	30.5	26.1	18.2	15.2	7.94
1.75V	272.3	218.0	137.6	79.7	47.5	37.5	29.8	25.5	18.0	15.0	7.86
1.80V	250.8	204.2	132.9	77.1	46.0	36.5	29.0	25.0	17.7	14.8	7.79
1.85V	208.6	171.8	115.6	69.6	42.4	33.9	27.1	23.3	16.7	14.0	7.41

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

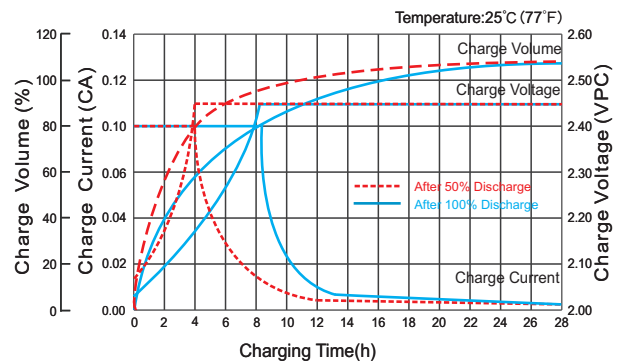
The battery must be fully charged before the capacity test. The C₁₀ should reach 95% after the first cycle and 100% after the third cycle.



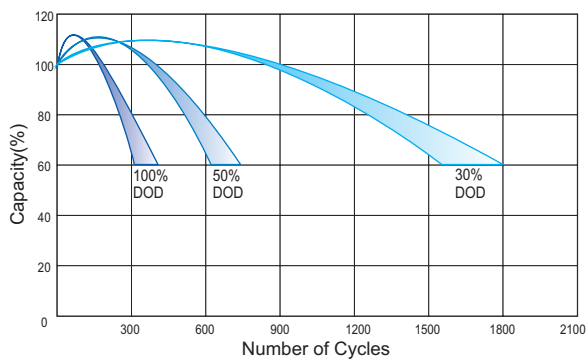
Discharge Characteristics Curve



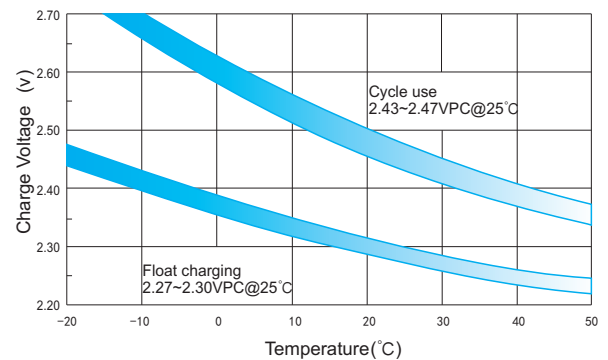
Charge Characteristic Curve for Cycle Use(IU)



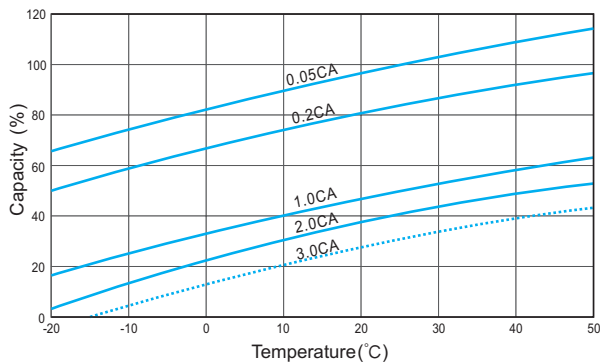
Cycle Life in Relation to Depth of Discharge



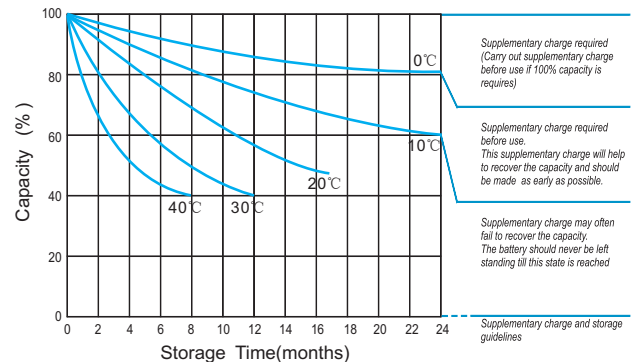
Relationship Between Charging Voltage and Temperature



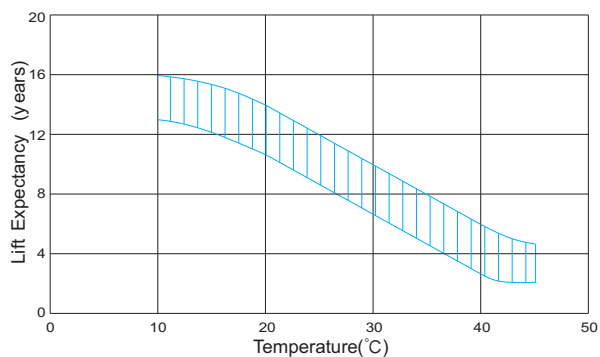
Temperature Effects on Capacity



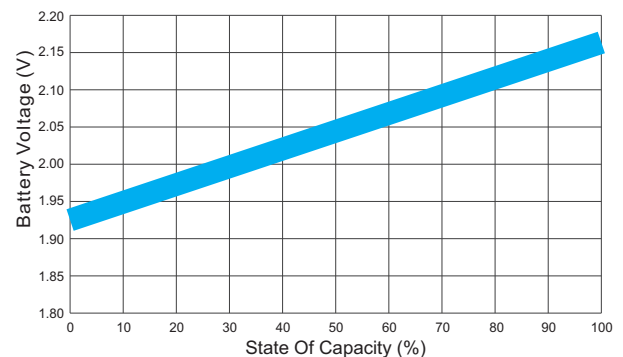
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)



(Note) All above information shall be changed without prior notice,