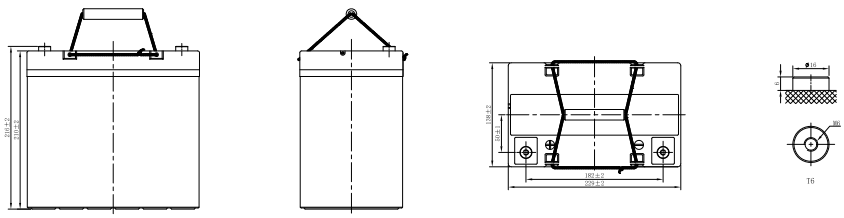
AT12550D

VALVE REGULATED LEAD ACID AGM BATTERY

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	55Ah@10hr-rate to 1.80V per cell @25℃
Weight	Approx. 17.7 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 9.0 mΩ
Terminal	T6(M6)
Max. Discharge Current	550A (5 sec)
Design Life	12 years (floating charge)
Max. Charging Current	16.5 A
Reference Capacity	C3 46.5AH C5 51.0AH C10 55.0AH C20 59.0AH
Float Charging Voltage	13.5 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.4 V~15.0 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	AMP-Tech Plus (VRLA) batteries can be stored for up to 6 months at 25℃ then recharging is recommended. Monthly self-discharge ratio is less than 3% at 25℃. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions



Length	229±2mm (9.02 inches)
Width	138±2mm (5.43 inches)
Height	210±2mm (8.27 inches)
Total Height	216±2mm (8.50 inches)

Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics :A(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.85V/cell	83.0	76.6	50.6	31.3	19.1	14.0	11.0	9.54	6.47	5.36	2.84
1.80V/cell	94.2	86.7	55.1	32.5	19.7	15.2	11.7	10.0	6.80	5.50	2.95
1.75V/cell	102.2	94.0	56.2	34.1	20.8	15.5	12.0	10.2	6.84	5.67	2.97
1.70V/cell	108.9	99.8	57.3	34.7	21.2	15.8	12.2	10.4	6.94	5.72	3.00
1.65V/cell	112.4	102.7	58.2	35.3	21.5	15.9	12.3	10.6	7.04	5.80	3.04
1.60V/cell	116.2	105.9	59.0	35.8	21.8	16.1	12.5	10.7	7.13	5.86	3.08

Constant Power Discharge Characteristics : WPC(25℃)

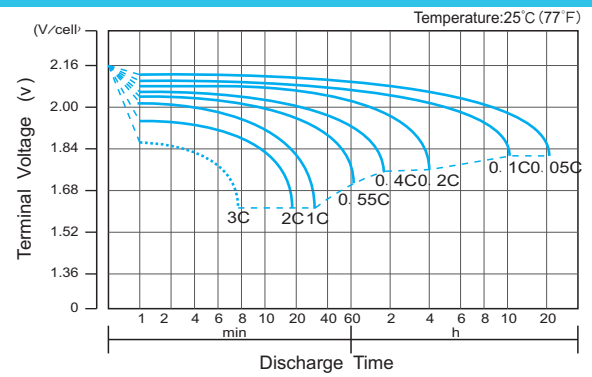
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.85V/cell	156.1	144.9	96.7	60.6	37.1	27.4	21.6	18.8	12.8	10.7	5.66
1.80V/cell	174.7	162.2	104.4	62.4	38.2	29.6	22.9	19.7	13.5	11.1	5.86
1.75V/cell	186.4	173.1	105.8	65.2	40.0	30.1	23.3	20.0	13.5	11.2	5.91
1.70V/cell	196.0	182.0	107.0	66.2	40.7	30.5	23.6	20.2	13.7	11.3	5.96
1.65V/cell	199.2	185.0	107.7	66.8	41.1	30.7	23.9	20.6	13.8	11.5	6.03
1.60V/cell	201.9	187.5	108.2	67.3	41.4	30.8	24.0	20.8	14.0	11.6	6.09

(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 C_{20} should reach 95% after the first cycle and 100% after the third cycle.

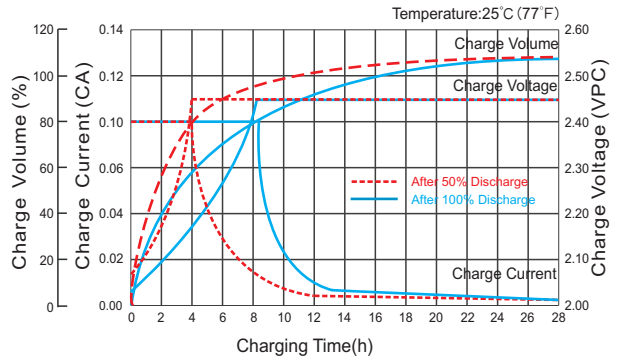
AT12550D

VALVE REGULATED LEAD ACID AGM BATTERY

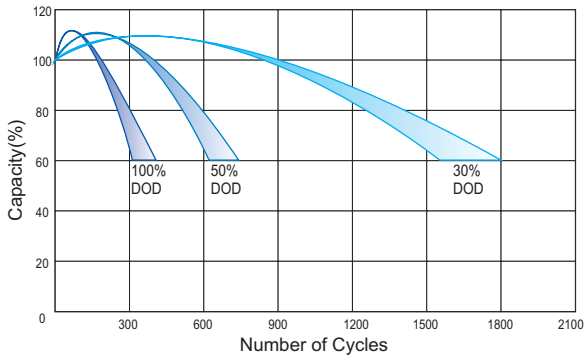
Discharge Characteristics Curve



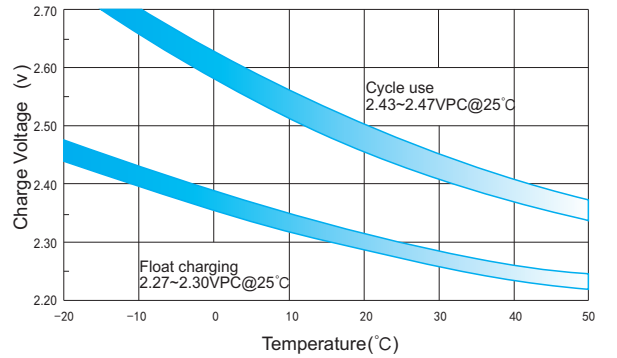
Charge Characteristic Curve for Cycle Use(IU)



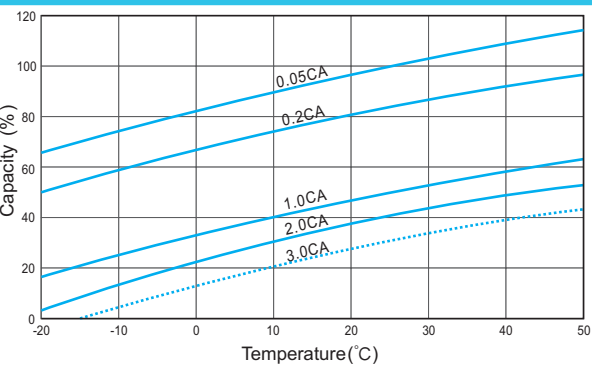
Cycle Life in Relation to Depth of Discharge



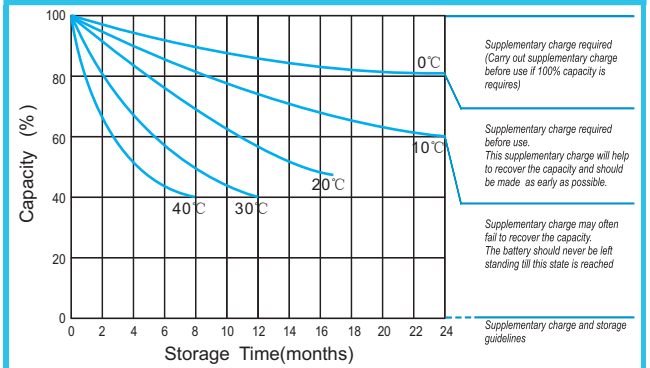
Relationship Between Charging Voltage and Temperature



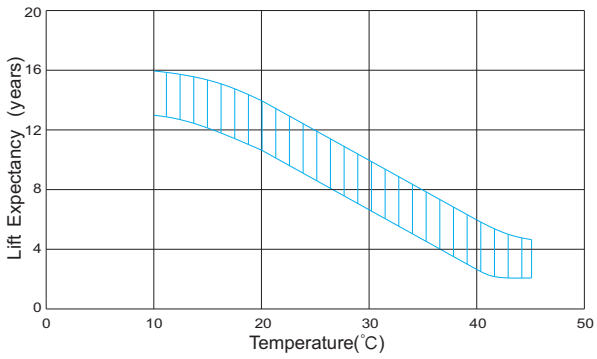
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)