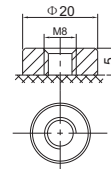
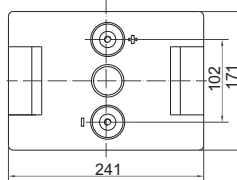
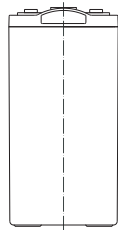
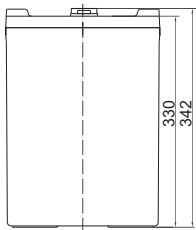




## Specification Sheet      Long Life 2V VRLA Battery      **FM2-500 (2V500Ah)**

<b>Cells Per Unit</b>	1
<b>Voltage Per Unit</b>	2
<b>Nominal Capacity</b>	500Ah@10hour-rate to 1.80V per cell @25°C
<b>Weight</b>	Approx. 29.5 Kg (Tolerance ±3.0%)
<b>Internal Resistance</b>	Approx. 0.60 mΩ
<b>Terminal</b>	F10(M8)
<b>Max. Discharge Current</b>	2500A (5 sec)
<b>Short Circuit Current</b>	4210A
<b>Design Life</b>	20 years (Float charging)
<b>Max. Charging Current</b>	100 A
<b>Reference Capacity</b>	C1    275.0AH C3    387.0AH C5    436.0AH C10   500.0AH
<b>Standby Use Voltage</b>	2.27 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	2.43 V~2.47 V @ 25°C Temperature Compensation: -4mV/°C/Cell
<b>Operating Temperature Range</b>	Discharge: -20°C~60°C Charge: -0°C~50°C Storage: -20°C~60°C
<b>Normal Operating Temperature Range</b>	25°C ±5°C
<b>Self Discharge</b>	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 charge batteries before using.
<b>Container Material</b>	A.B.S. UL94-HB, UL94-V0 Optional.

### Dimensions



Length	241±2mm (9.49 inches)
Width	171±2mm (6.73 inches)
Height	330±2mm (13.0 inches)
Total Height	342±2mm (13.5 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F10 TERMINAL

Unit: mm

#### Constant Current Discharge Characteristics : A (25°C)

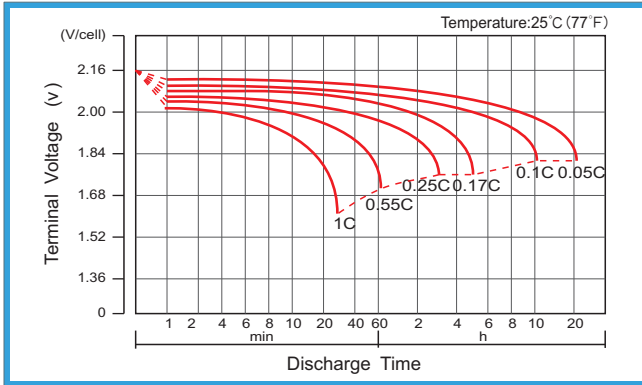
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	745.6	483.6	305.5	188.1	141.0	113.5	94.3	63.4	52.7
1.65V	698.5	464.2	295.0	182.1	136.7	110.4	91.9	62.7	52.1
1.70V	654.3	443.7	285.4	176.1	133.0	107.4	89.5	61.7	51.3
1.75V	608.8	424.1	275.0	170.0	129.0	104.7	87.0	60.9	50.6
1.80V	562.2	405.4	264.5	163.9	125.0	101.7	85.0	59.8	50.0
1.85V	466.5	349.1	237.2	150.2	115.6	94.5	79.3	56.2	47.1

#### Constant Power Discharge Characteristics : WPC (25°C)

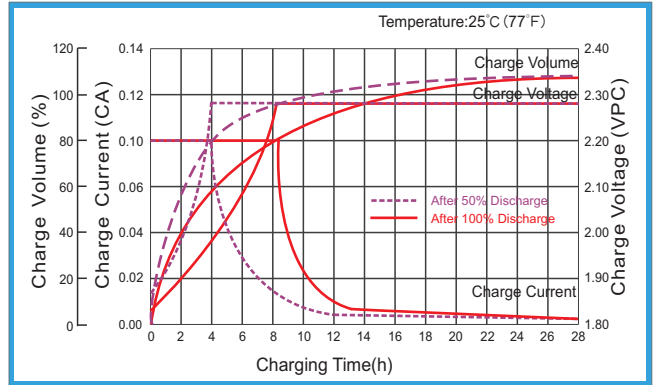
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	1303	878.3	574.1	356.6	269.4	217.9	181.8	123.8	103.7
1.65V	1239	852.1	557.6	346.9	262.1	212.8	177.8	122.7	102.6
1.70V	1178	822.6	542.8	337.3	256.1	207.8	173.8	121.1	101.2
1.75V	1112	794.3	526.1	327.0	249.6	203.3	170.0	119.6	99.9
1.80V	1042	766.9	509.0	316.9	242.8	198.1	166.2	117.8	98.8
1.85V	876.5	667.1	459.3	291.9	225.5	184.9	155.5	110.9	93.1

(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<sub>10</sub> should reach 95% after the first cycle and 100% after the third cycle.

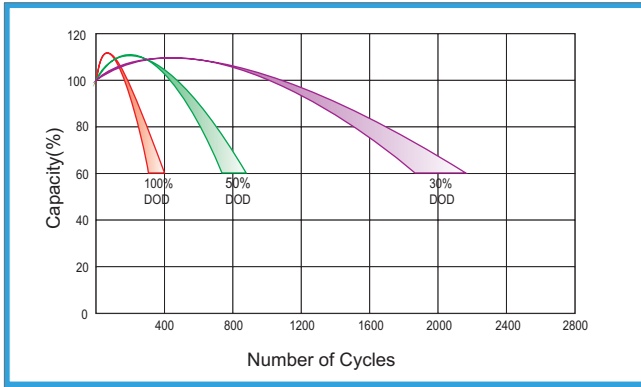
### Discharge Characteristics Curve



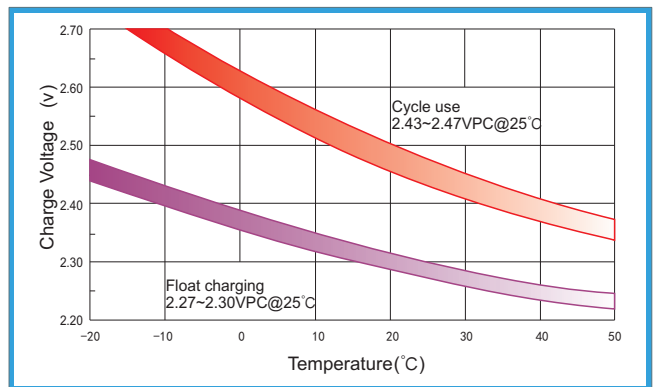
### Charge Characteristic Curve For Standby Use



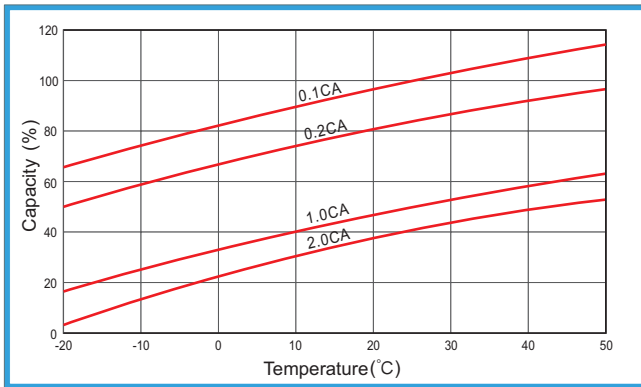
### Cycle Life In Relation To Depth Of Discharge



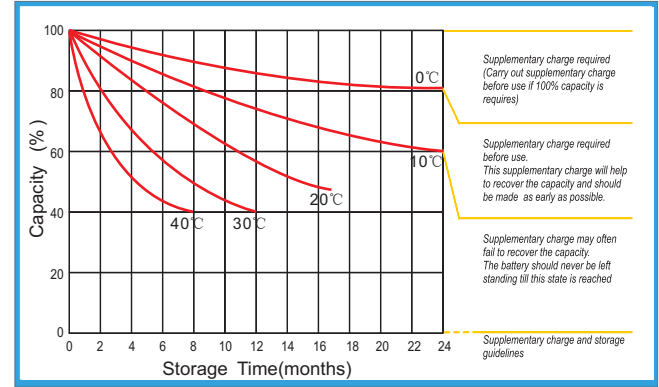
### Relationship Between Charging Voltage And Temperature



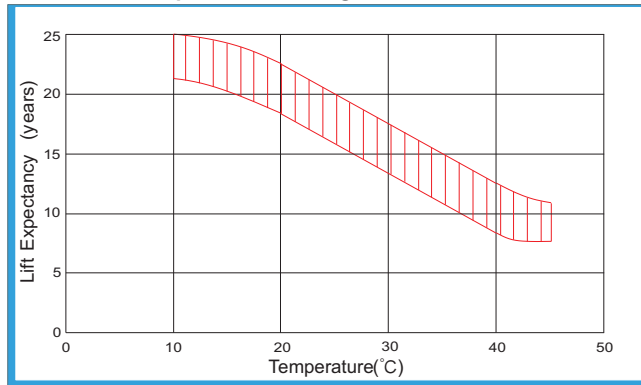
### Temperature Effects On Capacity



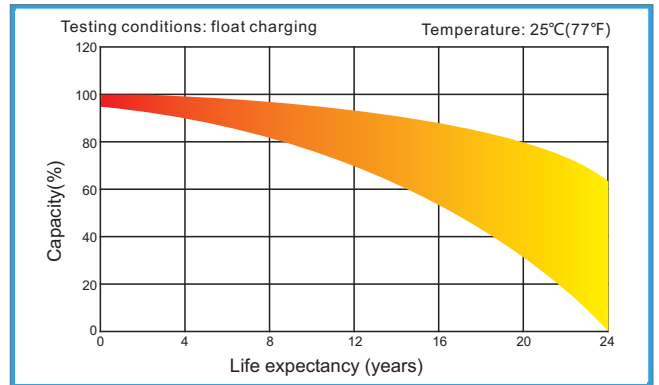
### Storage Characteristics



### Effect Of Temperature On Long Term Life



### Charge Characteristic Curve For Standby Use



(Note) All above information shall be changed without prior notice, AxiWin reserves the right to explain and update the latest information