



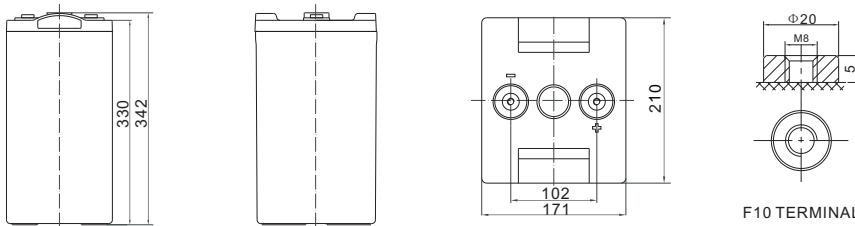
# FM2-400 (2V400Ah)

## Specification Sheet Long Life 2V VRLA Battery

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	400Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 24.5 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 0.70 mΩ
Terminal	F10(M8)
Max. Discharge Current	2000A (5 sec)
Short Circuit Current	3400A
Design Life	20 years (Float charging)
Max. Charging Current	80 A
Reference Capacity	C1 220AH C3 308AH C5 348AH C10 400AH
Standby Use Voltage	2.27 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.43 V~2.47 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	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.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



## Dimensions



Length	210±2mm (8.27 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

Unit: mm

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

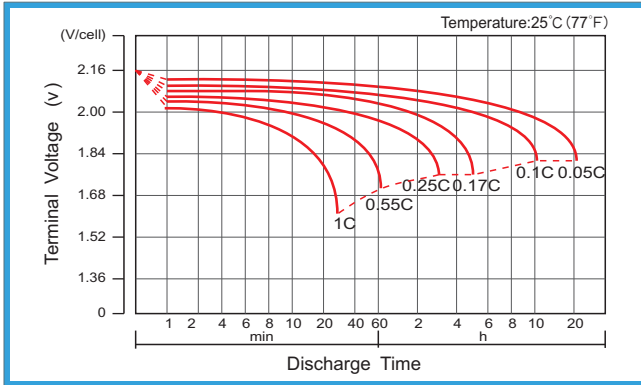
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	627.8	394.8	244.4	150.5	112.8	90.8	75.5	50.7	42.2
1.65V	588.2	379.0	240.0	145.7	109.3	88.4	73.5	50.1	41.7
1.70V	551.0	362.2	238.3	140.9	106.4	86.0	71.6	49.4	41.1
1.75V	512.7	346.2	220.0	136.0	102.7	83.8	69.6	48.7	40.5
1.80V	473.4	330.9	211.6	131.1	100.0	81.3	68.0	47.9	40.0
1.85V	392.8	285.0	199.8	120.1	92.4	75.6	63.4	44.9	37.7

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

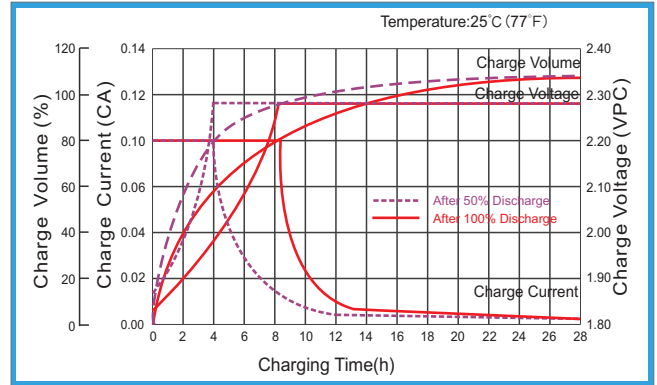
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	1098	717.0	459.3	285.3	215.5	174.4	145.5	99.0	83.0
1.65V	1044	695.6	446.1	277.5	209.7	170.3	142.2	98.1	82.1
1.70V	992.1	671.5	434.3	269.8	204.9	166.3	139.0	96.8	80.9
1.75V	936.6	648.4	420.9	261.6	199.6	162.6	136.0	95.7	80.0
1.80V	877.1	626.0	407.2	253.5	194.2	158.5	132.9	94.3	79.0
1.85V	738.1	544.5	367.4	233.5	180.4	147.9	124.4	88.7	74.5

(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.

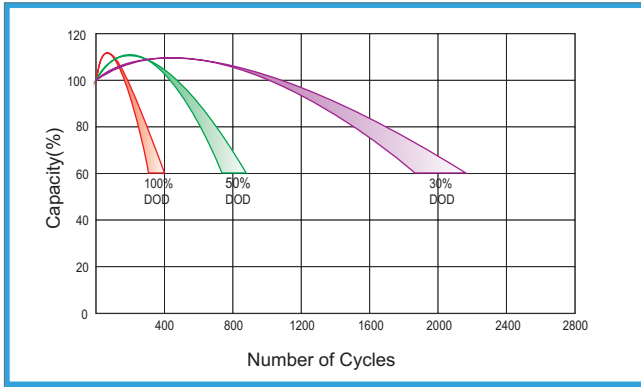
### Discharge Characteristics Curve



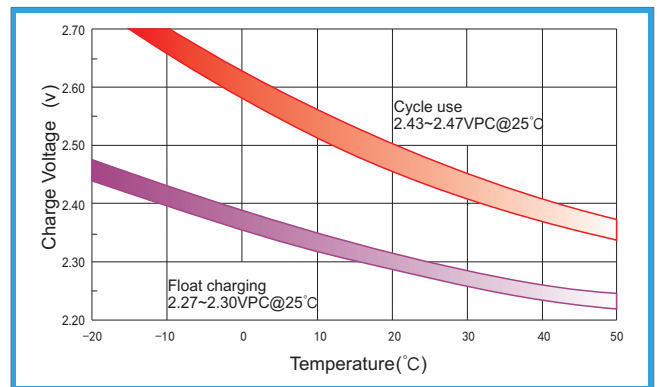
### Charge Characteristic Curve For Standby Use



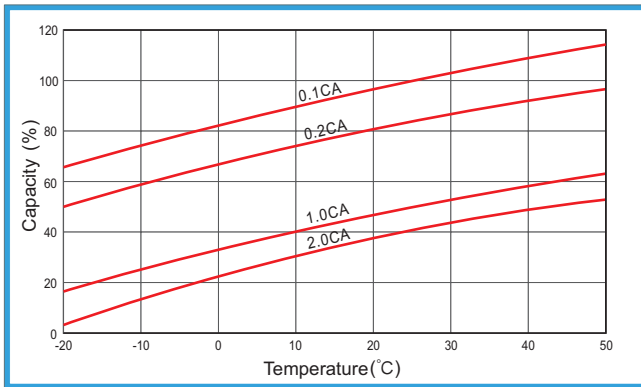
### Cycle Life In Relation To Depth Of Discharge



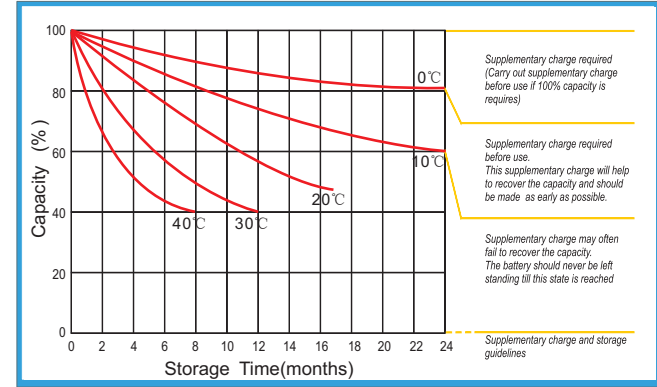
### Relationship Between Charging Voltage And Temperature



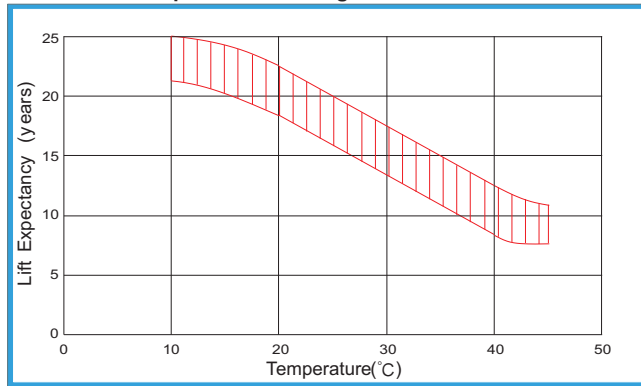
### Temperature Effects On Capacity



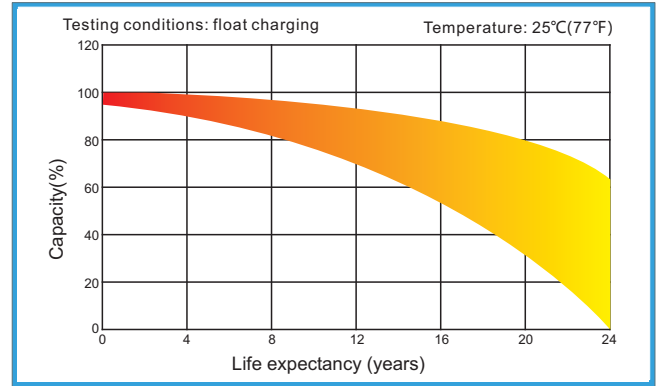
### Storage Characteristics



### 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