

## FRONT TERMINAL BATTERY

## 6FM180F/12Volt 180Ah

Front Terminal Series Batteries are specially designed for telecom use with 12+ years design life in float service. By adopting a new AGM separator and centralised venting system, the battery can be installed in any position while maintaining high reliability.

### GENERAL FEATURES

- ☆ Heavy Duty Grid
- ☆ Mechanized assembly
- ☆ Non-spillable construction
- ☆ High Reliability and Stability
- ☆ Sealed and Maintenance-free
- ☆ Long Life and low self-discharge design

### CONSTRUCTION

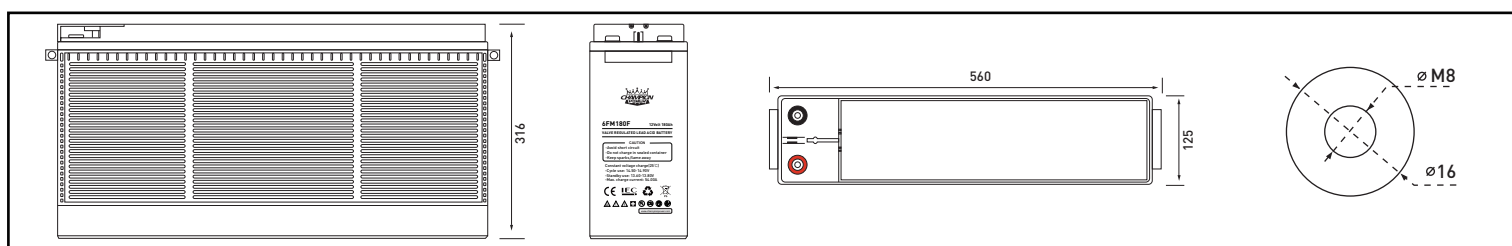
- ☆ Negative: Lead
- ☆ Positive: Lead dioxide
- ☆ Separator: Fiber glass
- ☆ Electrolyte: Sulfuric acid
- ☆ Safety Valve: EPDR
- ☆ Terminal: Copper
- ☆ Container: ABS(UL94-HB) / (UL94-V0)

### SPECIFICATION

| Battery Model                      | Nominal Voltage                            |                          | 12V                                        |                         |
|------------------------------------|--------------------------------------------|--------------------------|--------------------------------------------|-------------------------|
|                                    | Rated capacity (10Hour rate)               |                          | 180Ah                                      |                         |
|                                    | Cells Per battery                          |                          | 6                                          |                         |
| Dimension                          | Length                                     | Width                    | Height                                     | Total Height            |
|                                    | 560mm                                      | 125mm                    | 316mm                                      | 316mm                   |
| Approx Weight                      | 52.50Kg                                    |                          |                                            |                         |
| Internal Resistance                | Full charged at 25°C (77°F): Approx 3.00mΩ |                          |                                            |                         |
| Max. discharge current             | 1440A(5s)                                  |                          |                                            |                         |
| Floating design life @ 25°C (77°F) | 12 years                                   |                          |                                            |                         |
| Capacity @ 25°C (77°F)             | 10Hour rate(18.0A/10.8V)                   | 5Hour rate(30.60A/10.5V) | 3Hour rate(45.00A/10.5V)                   | 1Hour rate(99.0A/10.5V) |
|                                    | 180Ah                                      | 153Ah                    | 135Ah                                      | 99Ah                    |
| Capacity affected by Temp(10 HR)   | 40°C (104°F)                               | 25°C (77°F)              | 0°C (32°F)                                 | -15°C (5°F)             |
|                                    | 102%                                       | 100%                     | 85%                                        | 65%                     |
| Self Discharge @ 25°C (77°F)       | After 3 months storage                     |                          | After 6 months storage                     |                         |
|                                    | 93%                                        |                          | 65%                                        |                         |
| Charge method @ 25°C (77°F)        | Cycle Use                                  |                          | 14.70-14.90V (Max. charge current: 54.00A) |                         |
|                                    | Float Use                                  |                          | 13.60-13.80V                               |                         |

### OUTER DIMENSION (mm)

### TERMINAL TYPE (mm)

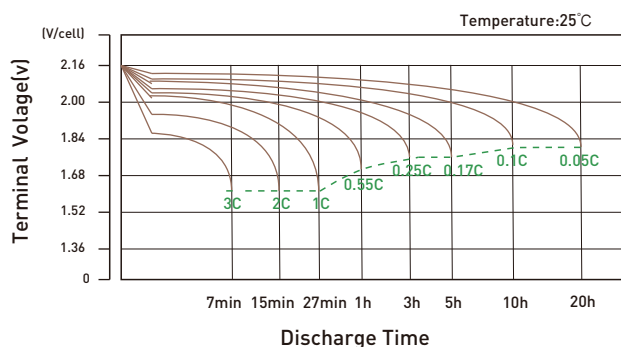


### CONSTANT CURRENT(AMP) AND CONSTANT POWER(WATT) DISCHARGE TABLE AT 25°C (77°F)

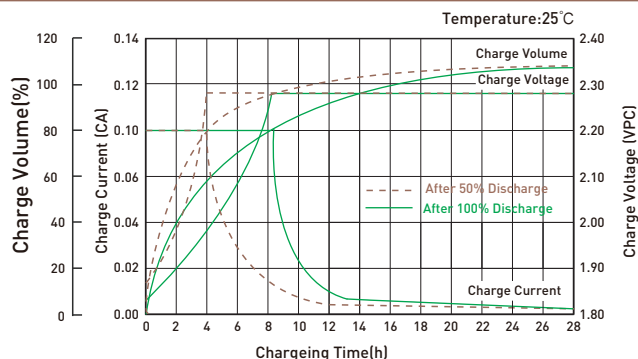
| F.V / TIME |   | 5min    | 10min   | 15min   | 30min   | 1h      | 2h     | 3h     | 4h     | 5h     | 8h     | 10h    | 20h    |
|------------|---|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|
| 9.60V      | A | 648.00  | 396.00  | 315.00  | 207.00  | 108.90  | 63.00  | 46.80  | 37.80  | 31.58  | 20.85  | 19.80  | 10.26  |
|            | W | 6868.80 | 4205.52 | 3370.50 | 2235.60 | 1187.01 | 686.70 | 514.80 | 415.80 | 347.33 | 231.43 | 219.78 | 115.43 |
| 10.20V     | A | 594.00  | 379.80  | 289.50  | 196.50  | 108.00  | 60.45  | 45.90  | 36.00  | 30.97  | 20.52  | 18.90  | 10.08  |
|            | W | 6474.60 | 4215.78 | 3227.92 | 2210.63 | 1215.00 | 683.08 | 518.67 | 408.60 | 351.57 | 232.90 | 214.52 | 114.41 |
| 10.50V     | A | 550.88  | 362.99  | 270.00  | 190.50  | 99.00   | 59.25  | 45.00  | 34.20  | 30.60  | 20.25  | 18.54  | 9.95   |
|            | W | 6059.63 | 4083.62 | 3051.00 | 2171.69 | 1128.60 | 678.41 | 515.25 | 393.30 | 351.90 | 232.88 | 213.21 | 114.47 |
| 10.80V     | A | 501.60  | 359.86  | 252.00  | 181.80  | 102.60  | 57.75  | 44.10  | 33.60  | 29.25  | 19.72  | 18.00  | 9.83   |
|            | W | 5517.60 | 4102.36 | 2885.40 | 2099.79 | 1185.03 | 667.01 | 511.56 | 391.44 | 340.76 | 229.80 | 209.70 | 114.50 |
| 11.10V     | A | 433.80  | 342.00  | 234.00  | 169.20  | 99.00   | 56.25  | 42.30  | 33.00  | 27.98  | 19.20  | 17.55  | 9.72   |
|            | W | 4901.94 | 3950.10 | 2714.40 | 1979.64 | 1158.30 | 658.13 | 497.03 | 389.40 | 330.11 | 226.56 | 207.09 | 114.70 |

## 6FM180F/12Volt 180Ah

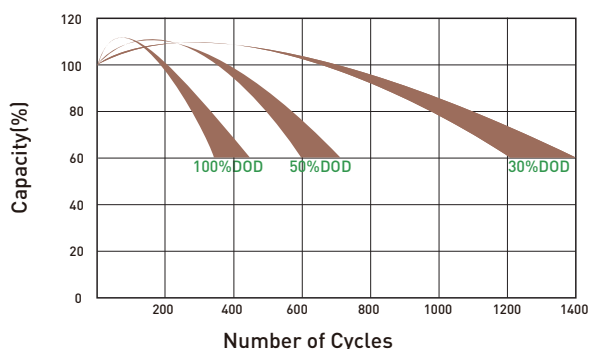
Discharge characteristic Curve



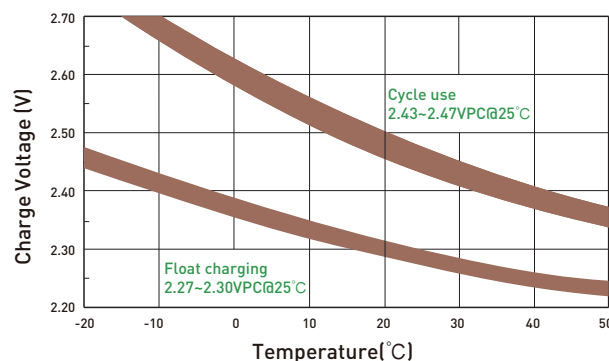
Charge Characteristic Curve For Standby Use



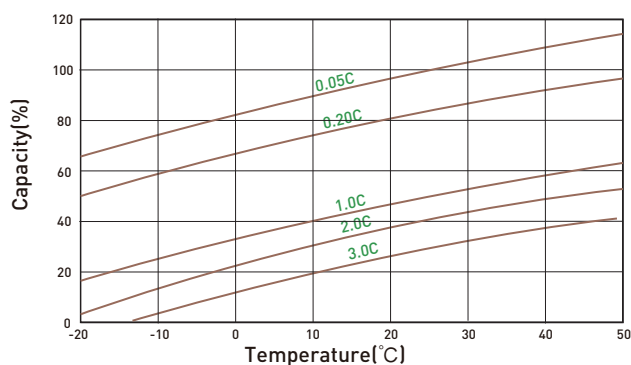
Cycle service life in relation to depth of discharge



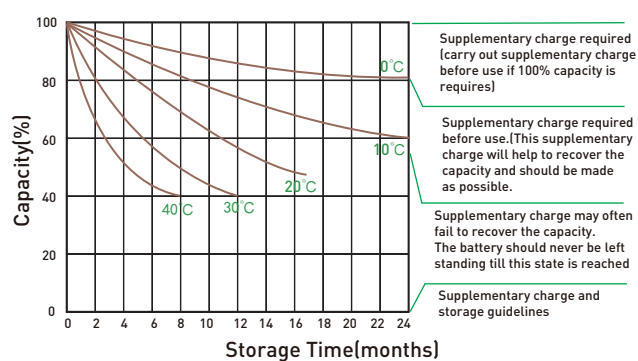
Relationship Between Charging Voltage And Temperature



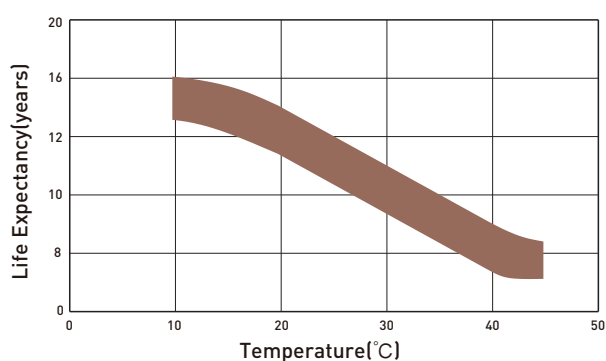
Temperature Effects On Capacity



Storage Characteristics



Effect Of emperature On Long Term Life



Charge Characteristic Curve For Standby Use

