

### Front Terminal VRLA Battery

#### Brief Introduction

CSBattery FB12 (Front Terminal) Series is especially designed for telecommunication use with 10-12 years design life in float service. By combining the newly developed paste formula with AGM structures, The FB Series features 10 years design life and Front Access connection for fast, easy installation and maintenance. This series is highly suited for telecom applications, UPS systems and other back up applications.



#### Complied Standards

|                |             |
|----------------|-------------|
| IEC60896-21/22 | BS6290part4 |
| JISC8704       | GB/T19638   |
| IEC61427       | CE/ISO      |

#### Applications

|                                |
|--------------------------------|
| Telecom System, BT Tower       |
| UPS System, EPS System         |
| Solar&Wind Energy System, Pump |
| Communication Equipments       |
| Wheel chair, Golf Car, Sweeper |
| Electric Powered Vehicles      |
| Power Tools, Control System    |

#### General features

|                                             |
|---------------------------------------------|
| AGM technology, Maintenance-free operation; |
| Front access terminal with standard         |
| Width for 19" and 23" ETSI racks            |
| High power density                          |
| Long float service life                     |
| Low self discharge                          |

#### Technical Specifications

|                                             |                          |                                                                     |
|---------------------------------------------|--------------------------|---------------------------------------------------------------------|
| Nominal Voltage                             | 12V                      |                                                                     |
| Design Floating Life @25℃                   | 10-12 Years              |                                                                     |
| Nominal Capacity @25℃(10 hour rate@1.8V )   | 100%C (Ah)               |                                                                     |
| Capacity @25℃                               | 20hour rate (1.8V )      | 106%C (Ah)                                                          |
|                                             | 5 hour rate (1.8V )      | 88%C(Ah)                                                            |
|                                             | 1 hour rate (1.75V )     | 63.8C(Ah)                                                           |
| Internal Resistance                         | Full Charged Battery@25℃ | ≤0.058*C(mΩ)                                                        |
| Ambient Temperature                         | Discharge                | -15℃~45℃                                                            |
|                                             | Charge                   | -15℃~45℃                                                            |
|                                             | Storage                  | -15℃~45℃                                                            |
| Max.Discharge Current@25℃                   | 6C (5s)                  |                                                                     |
| Capacity affected by Temperature (10 hour ) | 40℃                      | 105%                                                                |
|                                             | 25℃                      | 100%                                                                |
|                                             | 0℃                       | 85%                                                                 |
|                                             | -15℃                     | 65%                                                                 |
| Self-Discharge@25℃per Month                 | 3%                       |                                                                     |
| Charge (Constant Voltage) @25℃              | Standby Use              | Initial Charging Current<br>Less than C*0.25A<br>Voltage 13.6-13.8V |
|                                             | Cycle Use                | Initial Charging Current<br>Less than C*0.25A<br>Voltage 14.4-14.9V |

#### Battery Construction

| Component | Positive plate                               | Negative plate                                            | Container &Cover                      | Safety valve                         |
|-----------|----------------------------------------------|-----------------------------------------------------------|---------------------------------------|--------------------------------------|
| Features  | Thick high Sn low Ca grid with Special paste | Balanced Pb-Ca grid for improved recombination efficiency | Fire resistance ABS (UL94-V0optional) | Flame Si-Rubber and aging resistance |
| Component | Terminal                                     | Separator                                                 | Electrolyte                           | Pillar seal                          |
| Features  | Female Copper Insert M8                      | Advanced AGM separator for high pressure cell design      | Dilute High Purity Sulfuric acid      | Two layers epoxy resin seal          |

### Front Terminal VRLA Battery

#### FB12 12V Battery Items specifications

| Model    | Nominal Voltage (V) | Capacity (Ah) | Dimension (mm) |       |        |              | Net Weight |                  | Terminal |
|----------|---------------------|---------------|----------------|-------|--------|--------------|------------|------------------|----------|
|          |                     |               | Length         | Width | Height | Total Height | kgs        | Gross Weight kgs |          |
| FB12-55  | 12                  | 55            | 277            | 106   | 223    | 223          | 16         | 16.3             | M6       |
| FB12-80  | 12                  | 80            | 562            | 114   | 188    | 188          | 25         | 25.3             | M6       |
| FB12-100 | 12                  | 100           | 507            | 110   | 223    | 223          | 29.4       | 29.8             | M8       |
| FB12-110 | 12                  | 110           | 394            | 110   | 286    | 286          | 30.5       | 30.9             | M8       |
| FB12-125 | 12                  | 125           | 552            | 110   | 239    | 239          | 38         | 38.4             | M8       |
| FB12-150 | 12                  | 150           | 551            | 110   | 288    | 288          | 44         | 44.5             | M8       |
| FB12-160 | 12                  | 160           | 551            | 110   | 288    | 288          | 44.5       | 45               | M8       |
| FB12-175 | 12                  | 175           | 546            | 125   | 316    | 323.5        | 53.5       | 54               | M8       |
| FB12-180 | 12                  | 180           | 560            | 125   | 316    | 316          | 54         | 54.5             | M8       |
| FB12-190 | 12                  | 190           | 560            | 125   | 316    | 316          | 55.3       | 55.8             | M8       |
| FB12-200 | 12                  | 200           | 560            | 125   | 316    | 316          | 57         | 57.5             | M8       |



#### Performance Characteristics

