

# Protection Circuit Module Specifications For 19.2V LiFePO4 Battery Packs

Model: PCB-LFP19V15A

| No. | Test item                                    |  | Criterion                   |
|-----|--|--|-----------------------------|
| 1   | Voltage                                      | Charging voltage                       | DC: 21.6V CC/CV (3.6V/Cell) |
|     |  | Balance voltage for single cell        |                             |
| 2   | Current                                      | Balance current for single cell        |                             |
|     |  | Current consumption for single cell    | ≤20 μA                      |
|     |  | Maximal continuous charging current    | 15A                         |
|     |  | Maximal continuous discharging current | 15A                         |
| 3   | Over charge Protection<br>( single cell )    | Over charge detection voltage          | 3.90±0.025V                 |
|     |  | Over charge detection delay time       | 0.5S—2S                     |
|     |  | Over charge release voltage            | 3.80±0.05V                  |
| 4   | Over discharge protection<br>( single cell ) | Over discharge detection voltage       | 2.0±0.05V                   |
|     |  | Over discharge detection delay time    | 100—250mS                   |
|     |  | Over discharge release voltage         | 2.3±0.1V                    |
| 5   | Over current protection                      | Over current detection voltage         | 0.2±0.015V                  |
|     |  | Over current detection current         | 30±5A                       |
|     |  | Detection delay time                   | 5ms—30ms                    |
|     |  | Release condition                      | Cut load                    |
| 6   | Short protection                             | Detection condition                    | Exterior short circuit      |
|     |  | Detection delay time                   | 200-800us                   |
|     |  | Release condition                      | Cut load                    |
| 7   | Resistance                                   | Protection circuitry ( B- TO P- )      | ≤30mΩ                       |
| 8   | Temperature                                  | Operating Temperature Range            | -40~+85℃                    |
|     |  | Storage Temperature Range              | -40~+125℃                   |

P+=B+=Charge+/Discharge+

P- =Charge-/Discharge- Size:L48\*W44\*T3.5mm

