

# 180AH DEEP CYCLE LFP BATTERY



DCS-12V-180AH



## ELECTRICAL SPECIFICATIONS

|                          |                |
|--------------------------|----------------|
| Nominal Voltage          | 12.8V          |
| Nominal Capacity         | 180Ah          |
| Self Discharge (Storage) | ≤ 3% per Month |
| Parallel Connection      | Max 10         |
| Series Connection        | No             |

## CHARGE SPECIFICATIONS @ +77F (± 5F)

|                                   |               |
|-----------------------------------|---------------|
| Maximum Continuous Charge Current | ≤ 60A (0.3C)  |
| Recommend Charge Current          | ≤ 60A (0.3C)  |
| DC Charger Current Limit          | ≤ 60A (0.3C)  |
| Cycling Voltage                   | 11.6 - 14.2V  |
| Charge Voltage                    | 14.0 - 14.2V  |
| Float Voltage                     | 13.5V - 13.7V |

## DISCHARGE SPECIFICATIONS @ +77F (± 5F)

|                                      |               |
|--------------------------------------|---------------|
| Maximum Continuous Discharge Current | ≤ 180A (1.0C) |
| Lithium Cranking Amps (LCA)          | N/A           |
| Recommended Low Voltage Disconnect   | 12.0V         |
| Discharge Under-Voltage Protection   | 11.5V         |

## CHEMISTRY SPECIFICATIONS

|                   |                                      |
|-------------------|--------------------------------------|
| Cell Type         | Prismatic Cells - 3.2V (15Ah)        |
| Cell Chemistry    | CALB - Lithium Ferro Phosphate Cells |
| Cell C-Rate       | 2C                                   |
| Cycle Performance | 2500 Cycles @ 100% DOD*              |

\*2500 Cycles @ 100% DOD ≤ 80% Capacity Retention @ 77F

## WARRANTY

|                 |         |
|-----------------|---------|
| Warranty Period | 3 Years |
|-----------------|---------|

## PHYSICAL SPECIFICATIONS

|                        |                                  |
|------------------------|----------------------------------|
| Enclosure Material     | ABS Plastic                      |
| Dimensions (L x W x H) | 12.913" x 6.732" x 8.464"        |
| Weight                 | 39.7 lbs                         |
| Terminal Type          | Top Mount Steel/Copper M8 x 1.25 |
| Terminal Configuration | LHP or RHP                       |
| Terminal Torque        | 9 ft-lbs (12 Nm)                 |
| Ingress Protection     | IP54                             |

## BMS SPECIFICATIONS

|                                |                       |
|--------------------------------|-----------------------|
| BMS Type                       | DCS 3S                |
| BMS Low Voltage Cut Off (LVC)  | 11.5V                 |
| BMS High Voltage Cut Off (HVC) | 15.0V                 |
| Cell Balancing Type            | Active Cell Balancing |
| Data Communication             | Bluetooth             |

## TEMPERATURE SPECIFICATIONS

|                              |                 |
|------------------------------|-----------------|
| Charge Temperature Range     | +25°F to +149°F |
| Discharge Temperature Range  | -13°F to +149°F |
| BMS High Temperature Cut-Off | 230°F           |
| BMS Reconnect Temperature    | 176°F           |

## HEATING ELEMENT SPECIFICATIONS

|                               |     |
|-------------------------------|-----|
| Heater Activation Temperature | N/A |
| Heater Shut Off Temperature   | N/A |
| Energy Consumption            | N/A |

## COMPLIANCE SPECIFICATIONS

|                         |                                |
|-------------------------|--------------------------------|
| Certifications          | CE, UL 1642, IEC 62133 & 62619 |
| BMS Certification       | MIL-STD-810G (Method 514.6)    |
| Shipping Classification | UN 38.3                        |