

# 140AH TECH SPECS

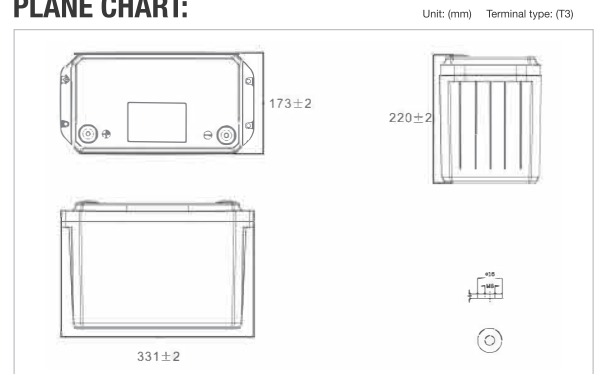
ATLAS 140AH Lithium Deep Cycle Battery



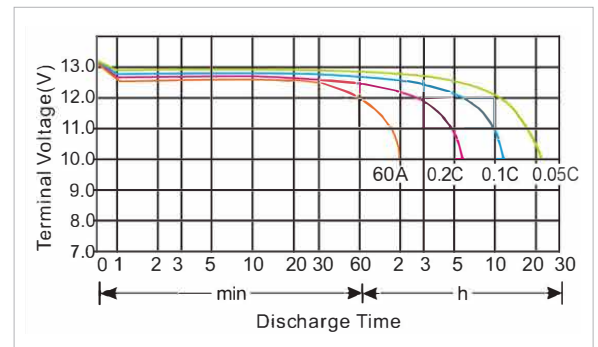
## PARAMETER CHART:

| Volts                            | 12V                                       |  |
|----------------------------------|---|--|
| Capacity (25°C)                  | 10 hours rate (10A)                       | <b>140AH</b>   |
| Internal Resistance              | Full charged battery 25°C                 | ≤ 20mΩ   |
| Capacity Affected by Temperature | 40°C                                      | 101%   |
|                                  | 25°C                                      | 100%   |
|                                  | 0°C                                       | 93%  |
| Residual Capacity (25°C)         | Capacity after 3 months storage           | 87%  |
|                                  | Capacity after 6 months storage           | 74%  |
|                                  | Capacity after 12 months storage          | 50%  |
| Charge (Constant Voltage)        | Cycle (25°C)                              | Initial charging current less than 60A. Voltage 14.4~15.0V |
|                                  | Float (25°C)                              | Charge voltage 13.6~13.8V                                  |
| Discharge Current (25°C)         | 60A (Max. continuous);<br>90A (5 Seconds) |  |
| Weight (Approx)                  | 13.8 kg                                   |  |

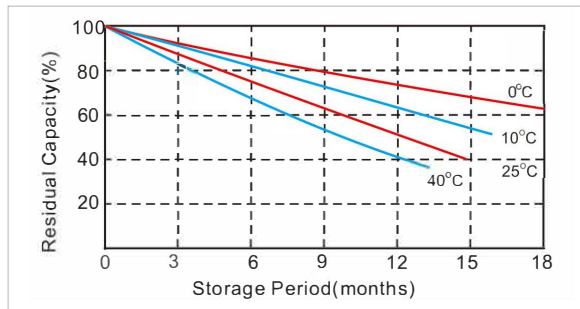
## PLANE CHART:



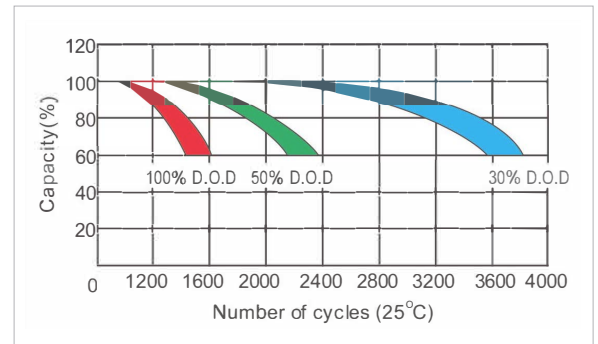
## DISCHARGE CURRENT 25°C



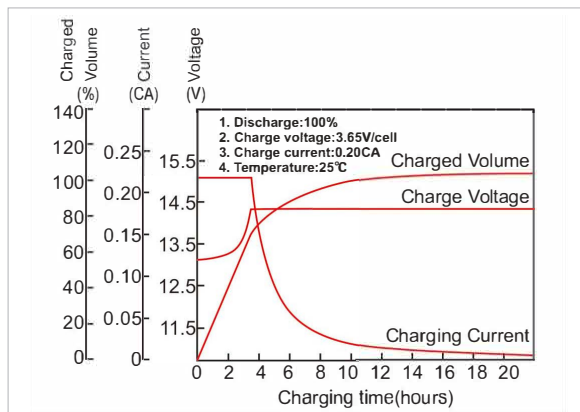
## RESIDUAL CAPACITY



## CYCLE SERVICE LIFE IN RELATION TO THE DEPTH OF DISCHARGE



## CONSTANT VOLTAGE CHARGING CHARACTERISTICS



## CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A, 25 °C)

| F.V/Time | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|----|----|----|----|----|-----|-----|
| 10V      | 60 | 40 | 30 | 24 | 15 | 12  | 6   |

## CONSTANT POWER DISCHARGE CHARACTERISTICS (WATT, 25 °C)

| F.V/Time | 2h  | 3h  | 4h  | 5h  | 8h  | 10h | 20h |
|----------|-----|-----|-----|-----|-----|-----|-----|
| 10V      | 720 | 480 | 360 | 288 | 180 | 144 | 72  |

## CAPACITY FACTORS WITH DIFFERENT TEMPERATURE

| Battery Type |     | -20°C | -10°C | 0°C | 5°C | 10°C | 20°C | 25°C | 30°C | 40°C | 45°C |
|--------------|-----|-------|-------|-----|-----|------|------|------|------|------|------|
| Li Battery   | 12V | 73%   | 82%   | 93% | 95% | 97%  | 100% | 100% | 100% | 101% | 102% |

\* The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.