

## CL2-500

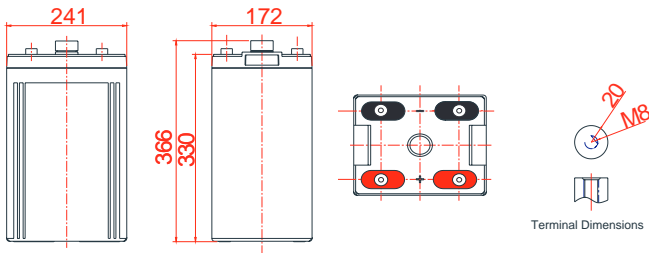


### General Features

- › High corrosion resistant performance: Pb-Ca multi-alloy grid
- › Long life
- › Excellent charge acceptance ability
- › Excellent deep cycle discharge capability
- › Strong high and low temperature performance
- › Precision sealing technology



Dimension: 241(L)x172(W) x330(H) x366(TH) Unit: mm



### Applications

- › Telecommunications system
- › Power systems
- › UPS/EPS
- › Auto control system
- › Solar/wind generating storage cyclic
- › Other general purpose

### Specification

|                        |   |                              |
|------------------------|---|------------------------------|
| Nominal Voltage        | 2V  |                              |
| Nominal Capacity       | 500Ah   |                              |
| Design life            | 15 years  |                              |
| Terminal               | M8  |                              |
| Approx. Weight         | Approx29.5kg (65.04lbs)                           |                              |
| Container Material     | ABS   |                              |
| Rated Capacity         | 500Ah   | 10Hour Rate (50.0A to 1.80V) |
|                        | 384Ah   | 3Hour Rate (128A to 1.80V)   |
|                        | 288Ah   | 1Hour Rate (288A to 1.75V)   |
| Internal resistance    | Full charged at 25°C: 0.36 m                      |                              |
| Max. Discharge Current | 5000A(5S)   |                              |
| Operating Temperature  | Discharge:  | -20 ~-50 (-4~ 122°F)         |
|                        | Charge:   | -20 ~-50 (-4~ 122°F)         |
|                        | Storage:  | -20 ~50 (-4~ 122°F)          |
| Charge current:        | Max.100A Recom.50A                                |                              |
| Charge Method (25 °C)  | Float Charge: 2.23-2.27V, recom.2.25V(-3mV/ °C)   |                              |
|                        | Equalize charge:2.30-2.35V, recom.2.35V(-4mV/ °C) |                              |
|                        | Cycle charge:2.40-2.50V, recom.2.40V(-5mV/ °C)    |                              |
| Self discharge         | 3% of capacity declined per month at 25°C         |                              |

### Constant Current Discharge Characteristics Unit: A ( 25 , 77 )

| FV/Time | 15min | 30min | 1h  | 2h  | 3h  | 5h   | 8h   | 10h  | 20h  |
|---------|-------|-------|-----|-----|-----|------|------|------|------|
| 1.60V   | 719   | 532   | 333 | 196 | 144 | 96.9 | 65.9 | 54.2 | 29.0 |
| 1.65V   | 670   | 500   | 316 | 192 | 141 | 94.6 | 64.9 | 53.7 | 28.7 |
| 1.70V   | 628   | 469   | 302 | 185 | 136 | 93.8 | 63.9 | 52.9 | 28.3 |
| 1.75V   | 595   | 436   | 288 | 178 | 132 | 91.2 | 63.1 | 52.1 | 27.9 |
| 1.80V   | 561   | 408   | 270 | 169 | 128 | 89.1 | 61.9 | 50.0 | 26.8 |
| 1.85V   | 497   | 364   | 245 | 157 | 122 | 86.0 | 60.1 | 49.5 | 26.5 |

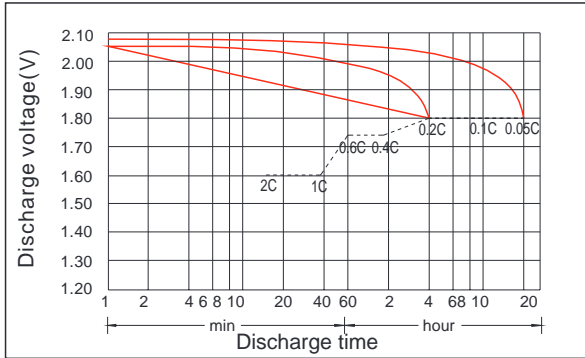
### Constant Power Discharge Characteristics Unit: W ( 25 , 77 )

| FV/Time | 15min | 30min | 1h  | 2h  | 3h  | 5h  | 8h  | 10h | 20h  |
|---------|-------|-------|-----|-----|-----|-----|-----|-----|------|
| 1.60V   | 1222  | 973   | 687 | 412 | 303 | 205 | 139 | 114 | 61.2 |
| 1.65V   | 1173  | 935   | 635 | 399 | 292 | 198 | 137 | 112 | 59.9 |
| 1.70V   | 1131  | 897   | 604 | 384 | 281 | 195 | 134 | 109 | 58.1 |
| 1.75V   | 1089  | 867   | 581 | 370 | 270 | 190 | 129 | 107 | 57.3 |
| 1.80V   | 1038  | 836   | 547 | 353 | 261 | 184 | 125 | 105 | 56.4 |
| 1.85V   | 945   | 744   | 506 | 323 | 247 | 176 | 121 | 101 | 54.2 |

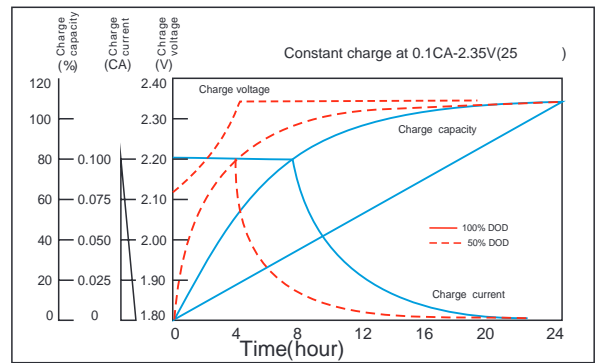
# CL Series lead-acid battery

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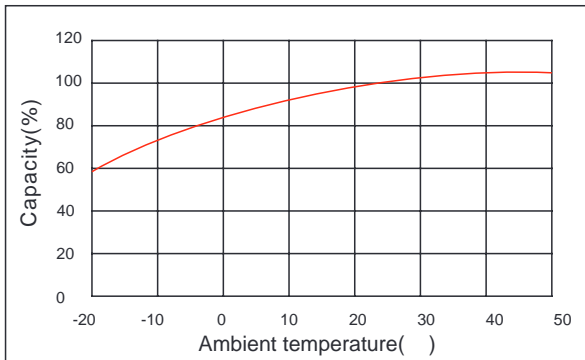
Discharge characteristic



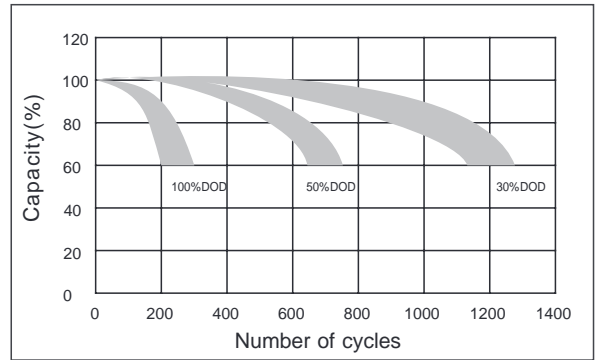
Charging characteristic



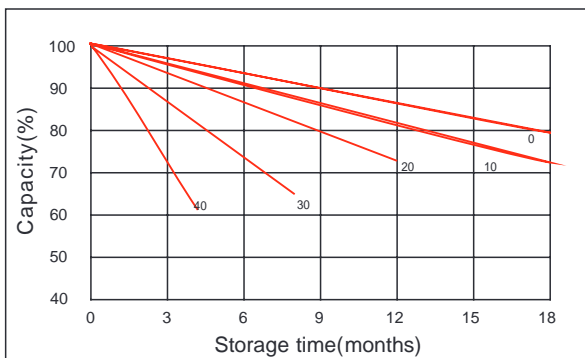
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

