



# HR6-28W

## Specification

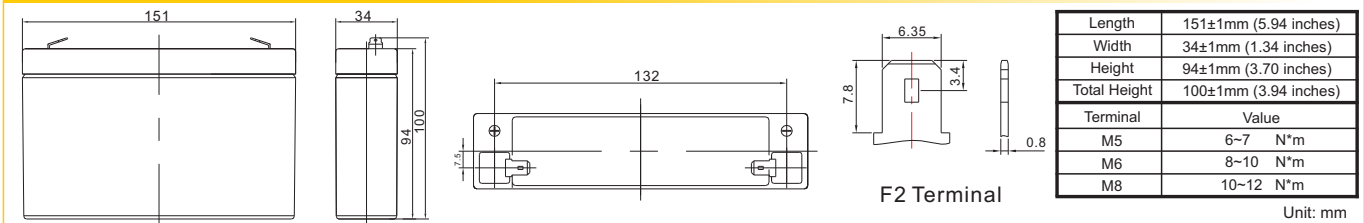
|                                      |   |
|--------------------------------------|---|
| Cells Per Unit                       | 3   |
| Voltage Per Unit                     | 6   |
| Capacity                             | 28W@15min-rate to 1.67V per cell @25°C  |
| Weight                               | Approx. 1.20 Kg (Tolerance ±4.0%)   |
| Internal Resistance                  | Approx. 10 mΩ   |
| Terminal                             | F2  |
| Max. Discharge Current               | 70A (5 sec)   |
| Short Circuit Current                | 390A  |
| Design Life                          | Could Reach 8 years   |
| Recommended Maximum Charging Current | 2.10 A  |
| Reference Capacity                   | C10 6.5AH<br>C20 7.0AH  |
| Standby Use Voltage                  | 6.80 V~6.90 V @ 25°C  |
| Cycle Use Voltage                    | 7.30 V~7.40 V @ 25°C  |
| Operating Temperature Range          | Discharge: -20°C~60°C<br>Charge: 0°C~50°C<br>Storage: -20°C~60°C  |
| Normal Operating Temperature Range   | 25°C ±5°C   |
| Self Discharge                       | RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using. |
| Constainer Material                  | A.B.S. UL94-HB, UL94-V0 Optional.   |



The HR (High Rate) series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 8 years design life in float service. By using strong grids and specially designed active material the HR series is with lower I.R, lower self discharge rate, high power, and longer service life performance. Generally the HR series offers 30% more power output than the standard range. Suitable for high power standby and cycling situation, such as UPS, datacenter, electric tools et al.



## Dimensions



### Constant Current Discharge Characteristics : A (25°C)

| F.V/Time | 3MIN  | 5MIN  | 8MIN  | 10MIN | 15MIN | 20MIN | 30MIN | 60MIN | 90MIN |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V    | 32.17 | 27.98 | 23.26 | 20.52 | 15.86 | 12.84 | 9.120 | 5.200 | 3.790 |
| 1.67V    | 29.77 | 25.89 | 21.82 | 19.26 | 15.04 | 11.98 | 8.694 | 4.956 | 3.608 |
| 1.70V    | 28.53 | 24.81 | 21.05 | 18.56 | 14.57 | 11.52 | 8.448 | 4.813 | 3.500 |
| 1.75V    | 26.95 | 23.43 | 20.00 | 17.43 | 13.89 | 11.21 | 8.210 | 4.734 | 3.421 |
| 1.80V    | 25.35 | 22.04 | 18.95 | 16.29 | 13.20 | 10.87 | 7.958 | 4.641 | 3.338 |
| 1.85V    | 23.66 | 20.57 | 17.82 | 15.10 | 12.44 | 10.50 | 7.664 | 4.530 | 3.238 |

### Constant Power Discharge Characteristics : WPC (25°C)

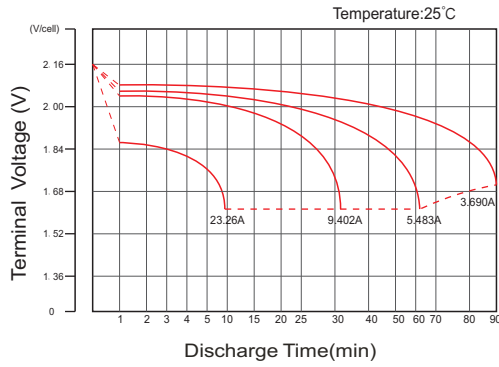
| F.V/Time | 3MIN  | 5MIN  | 8MIN  | 10MIN | 15MIN | 20MIN | 30MIN | 60MIN | 90MIN |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V    | 58.27 | 50.67 | 42.75 | 37.94 | 29.51 | 23.60 | 16.80 | 9.618 | 7.036 |
| 1.67V    | 54.44 | 47.34 | 40.49 | 35.95 | 28.24 | 22.23 | 16.17 | 9.255 | 6.764 |
| 1.70V    | 52.80 | 45.92 | 39.53 | 35.06 | 27.69 | 21.64 | 15.90 | 9.095 | 6.638 |
| 1.75V    | 50.50 | 43.91 | 38.03 | 33.33 | 26.73 | 21.31 | 15.65 | 9.059 | 6.571 |
| 1.80V    | 48.18 | 41.90 | 36.55 | 31.61 | 25.76 | 20.98 | 15.39 | 9.008 | 6.505 |
| 1.85V    | 45.88 | 39.89 | 35.07 | 29.90 | 24.79 | 20.66 | 15.12 | 8.972 | 6.439 |

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

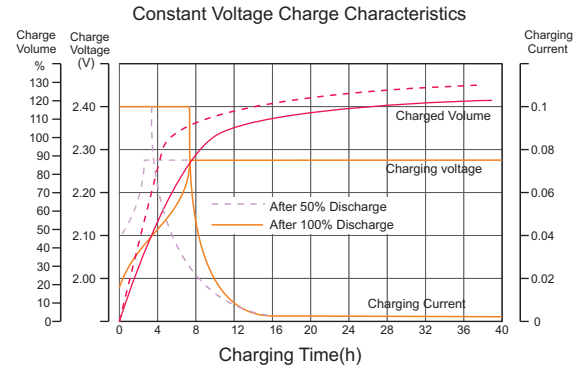
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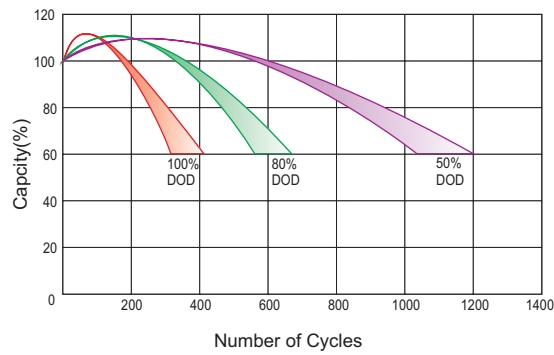
## Discharge Characteristics Curve



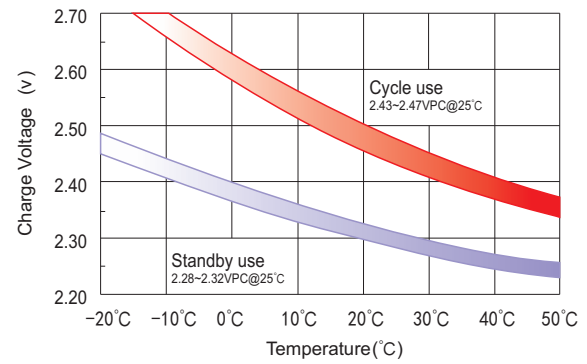
## Charge Characteristic Curve For Standby Use



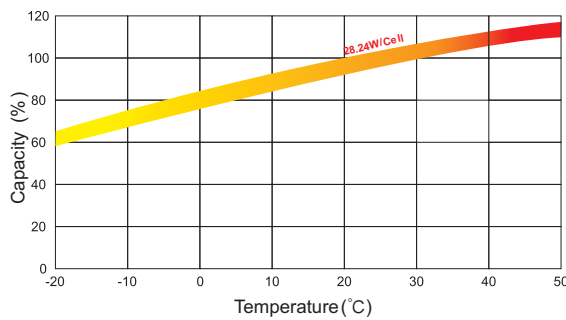
## Cycle Life In Relation To Depth Of Discharge



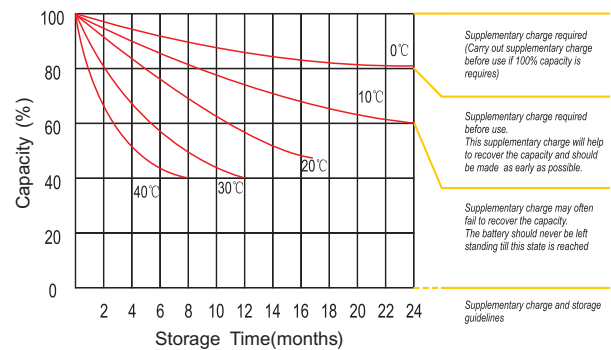
## Relationship Between Charging Voltage And Temperature



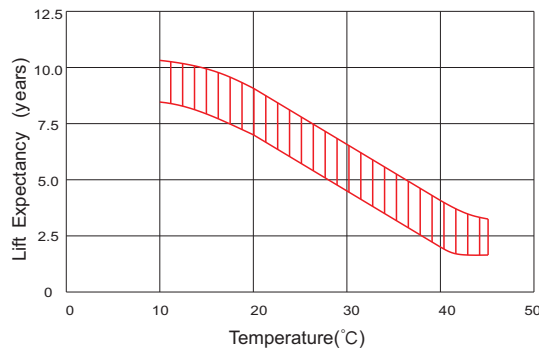
## Temperature Effects On Capacity



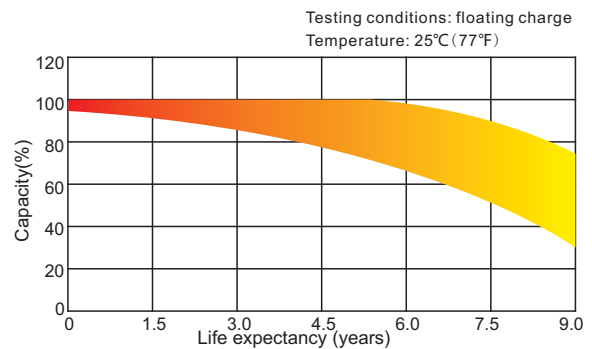
## Storage Characteristics



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use



For Battery Sales + EPA Battery Recycling and AC / DC Power Services, please contact:

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