



# HT12-80(12V80Ah)

## Specification

|                                      |   |
|--------------------------------------|---|
| Cells Per Unit                       | 6   |
| Voltage Per Unit                     | 12  |
| Nominal Capacity                     | 80Ah@10hour-rate to 1.80V per cell @25°C  |
| Weight                               | Approx. 30.5 Kg (Tolerance ±2.0%)   |
| Internal Resistance                  | Approx. 5.2 mΩ  |
| Terminal                             | F15(M6)/F12(M8)   |
| Max. Discharge Current               | 800A (5 sec)  |
| Design Life                          | 15 years (Float charging)   |
| Recommended Maximum Charging Current | 24 A  |
| Reference Capacity                   | C3 60.2AH<br>C5 69.4AH<br>C10 80.0AH<br>C20 84.6AH  |
| Standby Use Voltage                  | 13.6 V~13.8 V @ 25°C<br>Temperature Compensation: -3mV/°C/Cell  |
| Cycle Use Voltage                    | 14.6 V~14.8 V @ 25°C<br>Temperature Compensation: -4mV/°C/Cell  |
| Operating Temperature Range          | Discharge: -20°C~60°C<br>Charge: -10°C~60°C<br>Storage: -20°C~60°C  |
| Normal Operating Temperature Range   | 35°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. |
| Container Material                   | A.B.S. UL94-HB, UL94-V0 Optional.   |



HT series is High-temperature series battery with 15 years design life in float service. It meets with IEC, JIS, BS and YDT standards. With advanced AGM valve regulated technology and high purity raw material, the HT series battery maintains high consistency for better performance and reliable standby service life. It is designed for using under high temperature conditions.



## Dimensions

|              |                         |
|--------------|-------------------------|
| Length       | 306.5±2mm (12.1 inches) |
| Width        | 168.5±2mm (6.63 inches) |
| Height       | 210±2mm (8.27 inches)   |
| Total Height | 215±2mm (8.46 inches)   |
| Terminal     | Value                   |
| M5           | 6~7 N*m                 |
| M6           | 8~10 N*m                |
| M8           | 10~12 N*m               |

Unit: mm

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

| F.V/Time | 10MIN | 15MIN | 30MIN | 1HR   | 2HR   | 3HR   | 4HR   | 5HR   | 8HR  | 10HR | 20HR |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 1.60V    | 186.7 | 143.6 | 83.94 | 49.26 | 29.51 | 21.23 | 17.24 | 14.56 | 9.83 | 8.52 | 4.37 |
| 1.65V    | 181.1 | 139.8 | 82.09 | 48.34 | 29.08 | 20.95 | 17.03 | 14.39 | 9.73 | 8.44 | 4.34 |
| 1.70V    | 173.8 | 134.9 | 79.66 | 47.14 | 28.50 | 20.57 | 16.74 | 14.16 | 9.60 | 8.33 | 4.29 |
| 1.75V    | 164.4 | 128.4 | 76.47 | 45.55 | 27.74 | 20.07 | 16.37 | 13.87 | 9.42 | 8.19 | 4.23 |
| 1.80V    | 152.3 | 120.1 | 72.33 | 43.47 | 26.74 | 19.42 | 15.87 | 13.47 | 9.19 | 8.00 | 4.15 |
| 1.85V    | 137.2 | 109.7 | 67.05 | 40.80 | 25.44 | 18.56 | 15.21 | 12.96 | 8.88 | 7.75 | 4.04 |

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

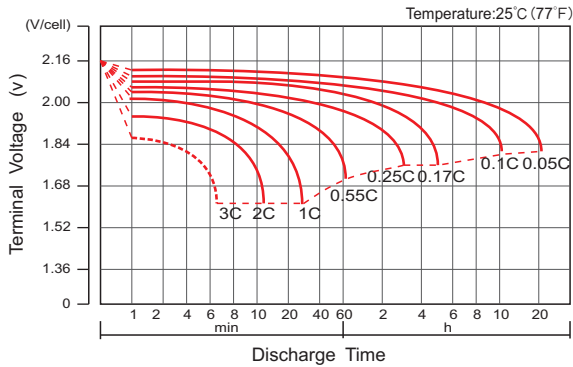
| F.V/Time | 10MIN | 15MIN | 30MIN | 1HR   | 2HR   | 3HR   | 4HR   | 5HR   | 8HR   | 10HR  | 20HR |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.60V    | 322.1 | 254.8 | 154.7 | 93.48 | 56.77 | 41.16 | 33.60 | 28.48 | 19.48 | 17.00 | 8.74 |
| 1.65V    | 320.8 | 253.3 | 153.6 | 92.72 | 56.34 | 40.86 | 33.36 | 28.30 | 19.34 | 16.87 | 8.69 |
| 1.70V    | 311.3 | 246.5 | 149.9 | 90.71 | 55.40 | 40.23 | 32.87 | 27.91 | 19.11 | 16.67 | 8.60 |
| 1.75V    | 299.7 | 238.1 | 145.4 | 88.10 | 54.17 | 39.42 | 32.25 | 27.42 | 18.79 | 16.40 | 8.49 |
| 1.80V    | 282.5 | 225.9 | 138.9 | 84.49 | 52.49 | 38.28 | 31.38 | 26.74 | 18.37 | 16.04 | 8.33 |
| 1.85V    | 259.1 | 209.2 | 130.0 | 79.86 | 50.21 | 36.75 | 30.20 | 25.80 | 17.79 | 15.56 | 8.12 |

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

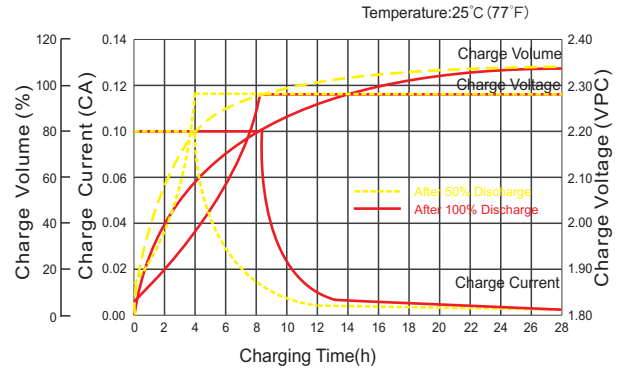
# HT12-80(12V80Ah)



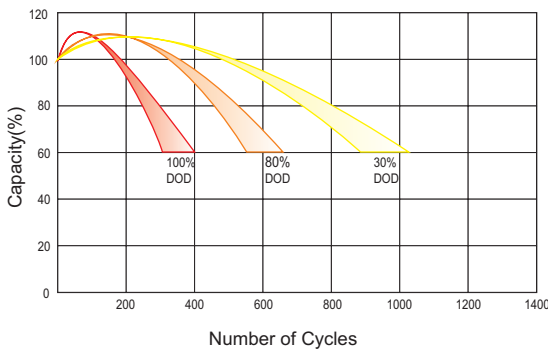
**Discharge Characteristics Curve**



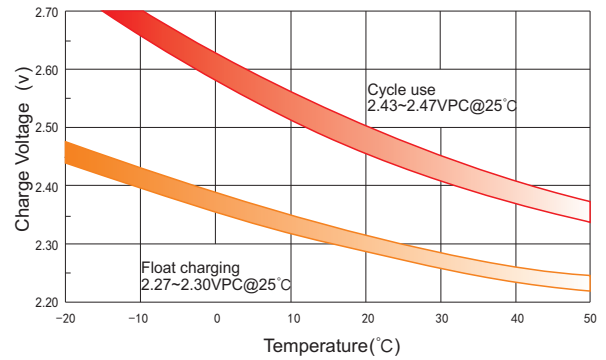
**Charge Characteristic Curve For Standby Use**



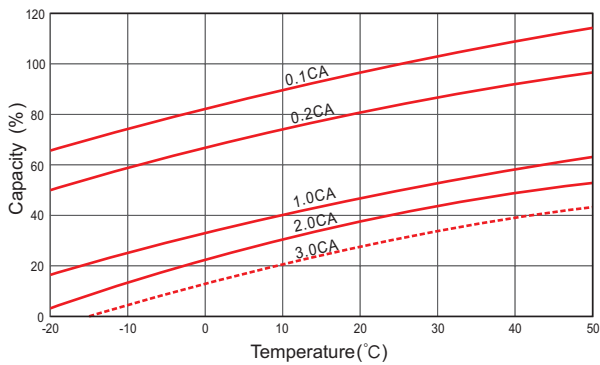
**Cycle Life In Relation To Depth Of Discharge**



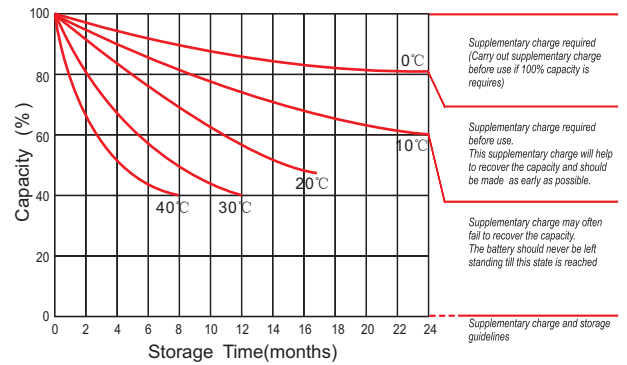
**Relationship Between Charging Voltage And Temperature**



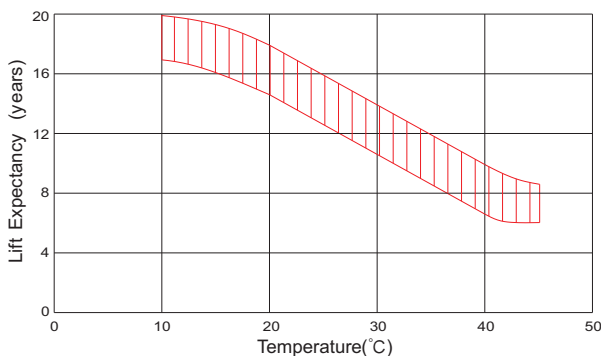
**Temperature Effects On Capacity**



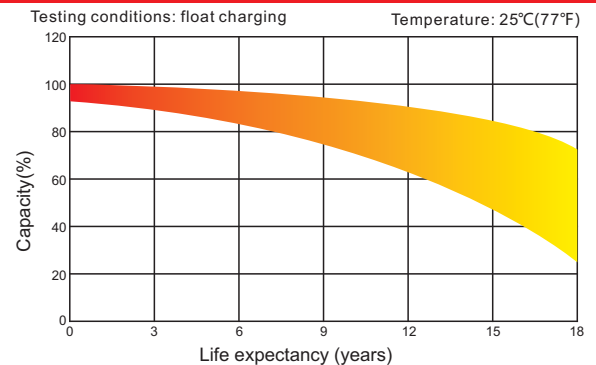
**Storage Characteristics**



**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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