

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



## Energy Storage Battery-Tubular GEL Technology-OPzV Series

# OPzV350E

(2V 350Ah)

### GENERAL FEATURES

- ◆ 20 years design life at floating condition
- ◆ Wide operating temperature range from -40°C to +60°C
- ◆ Tubular positive plate with prolonged cycle life
- ◆ Fumed silica gel electrolyte
- ◆ lead-calcium grid significantly improves the corrosion resistance ability
- ◆ Low self-discharge rate and long shelf life
- ◆ Excellent deep discharge recovery capability



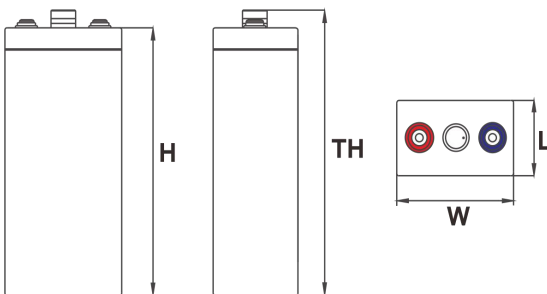
### Application

- ◆ Renewable energy system
- ◆ Hybrid solar power system
- ◆ Uninterrupted Power Supply (UPS)
- ◆ Communications and electric equipment
- ◆ Emergency lighting equipment
- ◆ Fire alarm and security systems
- ◆ Control equipment, and other factory automation equipment
- ◆ Emergency power supply (EPS)
- ◆ Lighting equipment

### Dimension

Unit:mm

|                  |                     |
|------------------|---------------------|
| Length           | 124±2mm / 4.88inch  |
| Width            | 206±2mm / 8.11inch  |
| Container Height | 473±3mm / 18.62inch |
| Total Height     | 505±3mm / 19.88inch |



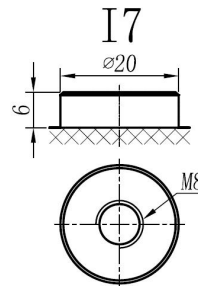
### Terminal

Unit:mm

Terminal Type: I7

### Weight

27kg 59.52lbs



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## OPzV350E

### Specification

|   |   |  |
|---|---|--|
| <b>Nominal Voltage</b>                  | 2V  |  |
| <b>Rated Capacity(25°C)</b>             | 371Ah   | 20hr Rate(1.80V/cell)                                    |
|   | 350Ah   | 10hr Rate(1.80V/cell)                                    |
|   | 305Ah   | 5hr Rate(1.75V/cell)                                     |
|   | 274Ah   | 3hr Rate(1.70V/cell)                                     |
|   | 209Ah   | 1hr Rate(1.60V/cell)                                     |
| <b>Container Material</b>               | ABS (Fire-proofing ABS container available)   |  |
| <b>Operating Temperature Range</b>      | <b>Discharge</b>  | -40 ~ +60°C  |
|   | <b>Charge</b>   | 0 ~ +40°C  |
|   | <b>Storage</b>  | -20 ~ +40°C  |
| <b>Capacity Effected by Temperature</b> | <b>40°C / 104°F</b>   | 106%   |
|   | <b>25°C / 77°F</b>  | 100%   |
|   | <b>0°C / 32°F</b>   | 86%  |
|   | <b>-20°C / -4°F</b>   | 60%  |
| <b>Charge Voltage</b>                   | <b>Float Voltage</b>  | 2.23V/cell@25°C, Compensation Factor: -3mV/cell/°C       |
|   | <b>Equalize Voltage</b>   | 2.35 -2.40V/cell@25°C, Compensation Factor: -3mV/cell/°C |
|   | <b>Cycle Voltage</b>  | 2.40 -2.50V/cell@25°C, Compensation Factor: -5mV/cell°C  |
| <b>Max Charging Current</b>             | 70A (0.2C)  |  |
| <b>Max. Discharge Current (5S)</b>      |   |  |
| <b>Internal Resistance</b>              | 0.6mΩ   |  |
| <b>Self Discharge</b>                   | <3%, OPZV series stored at 25 °C require a supplementary charge every six months, the charging interval would shrink when the ambient temperature went higher |  |

### Discharge Performance

Constant Current Discharge Table (25°C/77°F) Unit: A

| F.V/Time   | 15min | 30min | 1h  | 2h  | 3h   | 5h   | 8h   | 10h  | 20h  |
|------------|-------|-------|-----|-----|------|------|------|------|------|
| 1.85V/cell | 251   | 201   | 159 | 109 | 83.2 | 57.4 | 40.9 | 33.9 | 17.9 |
| 1.80V/cell | 279   | 221   | 174 | 116 | 87.3 | 59.5 | 42.6 | 35.0 | 18.6 |
| 1.75V/cell | 298   | 236   | 183 | 121 | 89.4 | 61.1 | 43.5 | 35.9 | 19.0 |
| 1.70V/cell | 316   | 250   | 193 | 125 | 91.3 | 62.5 | 44.1 | 36.3 | 19.3 |
| 1.65V/cell | 333   | 263   | 201 | 128 | 93.0 | 63.5 | 44.8 | 36.7 | 19.4 |
| 1.60V/cell | 351   | 271   | 209 | 130 | 93.8 | 64.2 | 45.2 | 37.1 | 19.5 |

Constant Power Discharge Table (25°C/77°F) Unit: W

| F.V/Time   | 15min | 30min | 1h  | 2h  | 3h  | 5h  | 8h   | 10h  | 20h  |
|------------|-------|-------|-----|-----|-----|-----|------|------|------|
| 1.85V/cell | 472   | 382   | 304 | 210 | 161 | 112 | 80.2 | 66.6 | 35.4 |
| 1.80V/cell | 513   | 412   | 329 | 221 | 168 | 115 | 82.7 | 68.3 | 36.4 |
| 1.75V/cell | 539   | 433   | 343 | 230 | 171 | 118 | 84.2 | 69.6 | 37.1 |
| 1.70V/cell | 563   | 452   | 358 | 236 | 174 | 120 | 85.0 | 70.2 | 37.5 |
| 1.65V/cell | 583   | 471   | 370 | 241 | 176 | 121 | 86.0 | 70.7 | 37.7 |
| 1.60V/cell | 605   | 479   | 382 | 243 | 177 | 122 | 86.5 | 71.2 | 37.8 |



Motive



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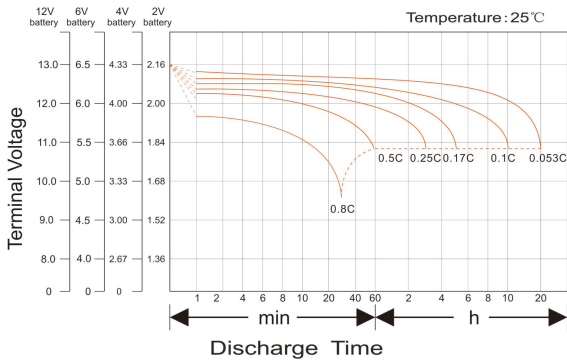


Reserve Battery

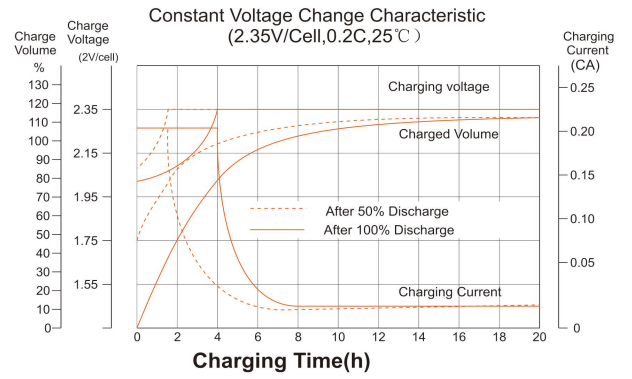


Motorcycle Battery

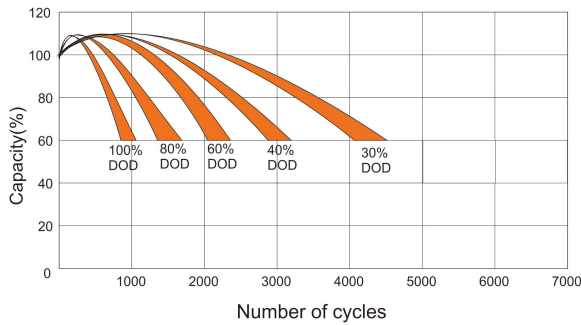
### Discharge Characteristics Curve



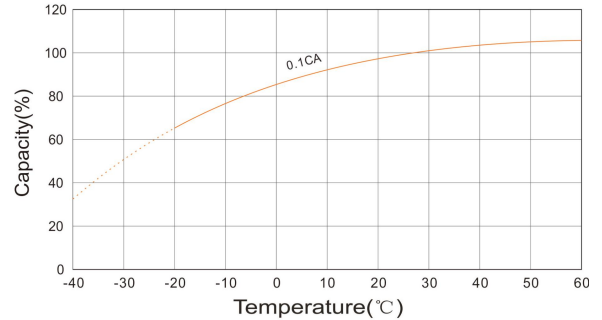
### Charging Characteristics Curve



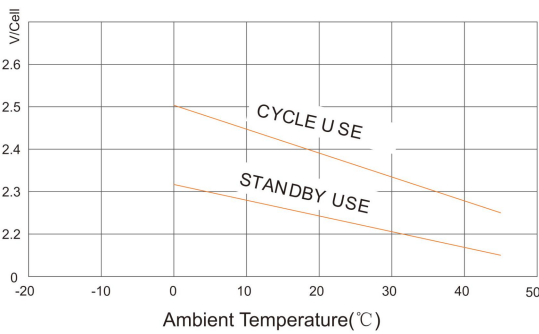
### Cycle life in relation to depth of Discharge



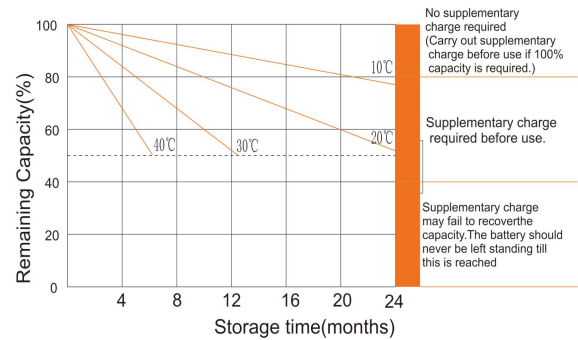
### Temperature effects on Capacity



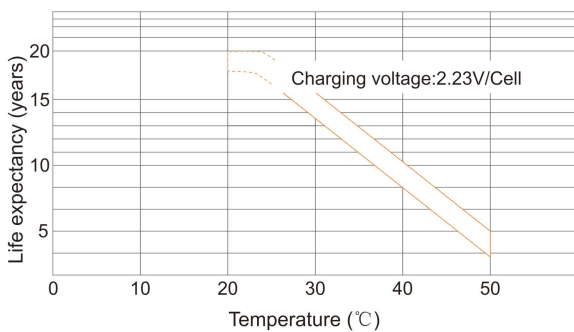
### Relationship between charging voltage and temperature



### Self-discharge Characteristics



### Temperature effects on Float life



### Life Characteristics of Standby use

