

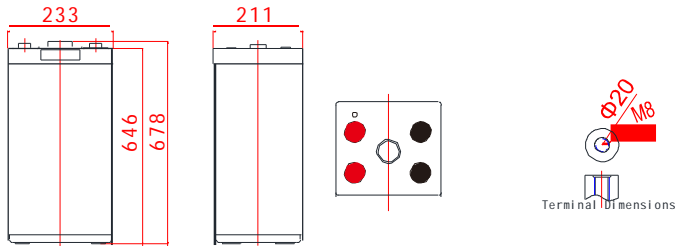


### General Features

- › Nanosilica colloidal electrolyte and tubular plate design to enhance battery performance
- › Tubular plate design makes long battery life
- › Relatively rich electrolyte, high temperature and low temperature performance is superior
- › Long cycle life, excellent deep cycle discharge ability
- › Excellent charge acceptance ability
- › Precision sealing technology



Dimension: 211(L)×233(W)×646(H)×678(TH) Unit: mm



- › Solar / wind energy and other new energy storage
- › Power systems
- › Telecommunications system
- › UPS/EPS
- › Auto control system
- › Other general purpose

### Specification

|                                 |   |                             |
|---------------------------------|---|-----------------------------|
| Nominal Voltage                 | 2V  |                             |
| Nominal Capacity                | 1000Ah  |                             |
| Design life                     | 20 years  |                             |
| Terminal                        | M8  |                             |
| Approx. Weight                  | Approx 70.0kg (154lbs)                            |                             |
| Container Material              | ABS   |                             |
| Rated Capacity                  | 1000Ah  | 10Hour Rate (100A to 1.80V) |
|                                 | 756Ah   | 3Hour Rate (252A to 1.80V)  |
|                                 | 555Ah   | 1Hour Rate (555A to 1.75V)  |
| Internal resistance             | Full charged at 25°C:                             | 0.24 mΩ                     |
| Max. Discharge Current          | 8000A(5S)   |                             |
| Operating Temperature           | Discharge:  | -40~60°C (-40~ 140°F)       |
|                                 | Charge:   | -20~50°C (-4~ 122°F)        |
|                                 | Storage:  | -20~50°C (-4~ 122°F)        |
| Charge current:                 | Max. 200A ; Recom.100A                            |                             |
| Float Charge voltage(-3mV/°C) : |   |                             |
| Charge Method (25 °C)           | 2.23-2.27V, recom.2.25V(Full floating system)     |                             |
|                                 | 2.23-2.27V, recom.2.27V(Cycle use system)         |                             |
|                                 | 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°C, 77°F)

| FV/Time | 15min | 30min | 1h  | 2h  | 3h  | 5h  | 8h  | 10h  | 20h  |
|---------|-------|-------|-----|-----|-----|-----|-----|------|------|
| 1.60V   | 1093  | 873   | 607 | 373 | 268 | 184 | 129 | 106  | 56.8 |
| 1.65V   | 1042  | 833   | 595 | 367 | 265 | 181 | 127 | 105  | 56.3 |
| 1.70V   | 990   | 782   | 573 | 357 | 261 | 178 | 126 | 104  | 55.4 |
| 1.75V   | 933   | 730   | 555 | 348 | 257 | 174 | 124 | 102  | 54.6 |
| 1.80V   | 838   | 669   | 520 | 337 | 252 | 170 | 121 | 100  | 53.4 |
| 1.85V   | 708   | 596   | 487 | 323 | 242 | 163 | 118 | 97.9 | 51.9 |

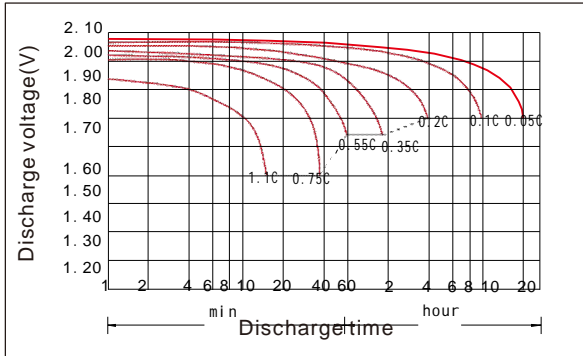
### Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

| FV/Time | 15min | 30min | 1h   | 2h  | 3h  | 5h  | 8h  | 10h | 20h |
|---------|-------|-------|------|-----|-----|-----|-----|-----|-----|
| 1.60V   | 2183  | 1733  | 1177 | 733 | 563 | 377 | 270 | 224 | 120 |
| 1.65V   | 2082  | 1650  | 1115 | 723 | 548 | 372 | 266 | 214 | 117 |
| 1.70V   | 1988  | 1578  | 1083 | 710 | 533 | 364 | 260 | 215 | 115 |
| 1.75V   | 1883  | 1510  | 1045 | 692 | 519 | 355 | 254 | 210 | 112 |
| 1.80V   | 1790  | 1453  | 1050 | 671 | 503 | 344 | 247 | 205 | 109 |
| 1.85V   | 1642  | 1377  | 962  | 635 | 481 | 327 | 238 | 199 | 106 |

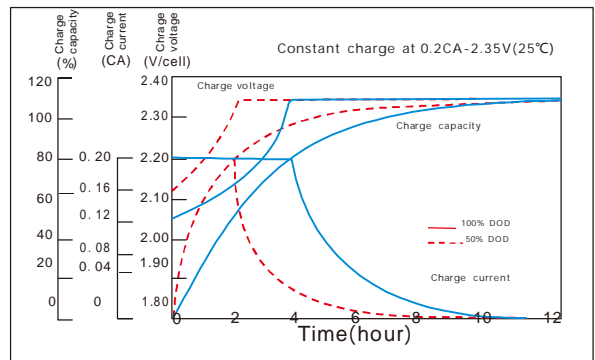
# OPZV2-1000

# OPZV Series tubular GEL battery

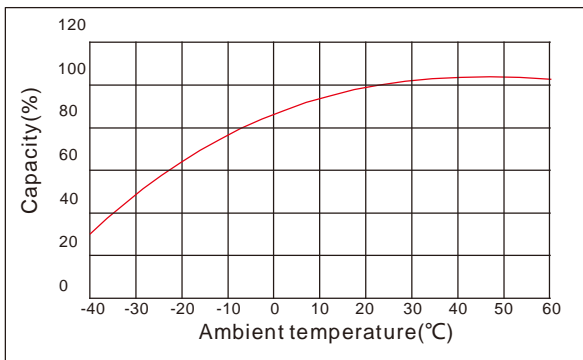
Discharge characteristic



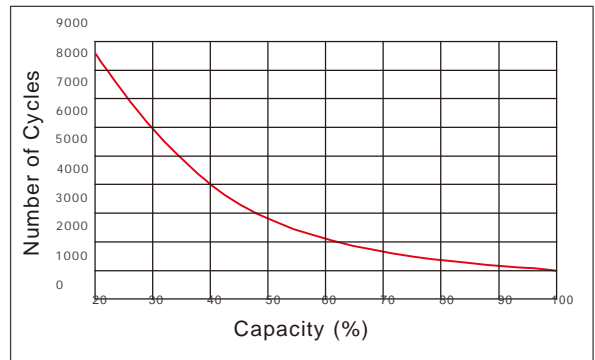
Charging characteristic



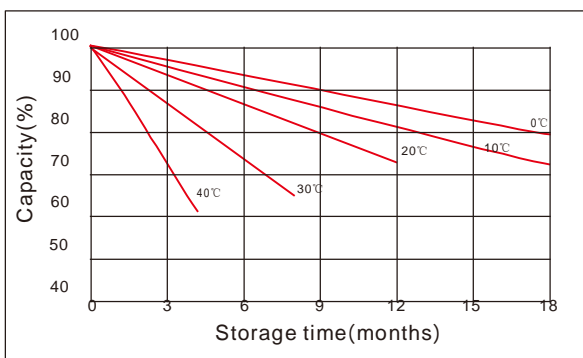
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

