

# 2VRE6-2000TG

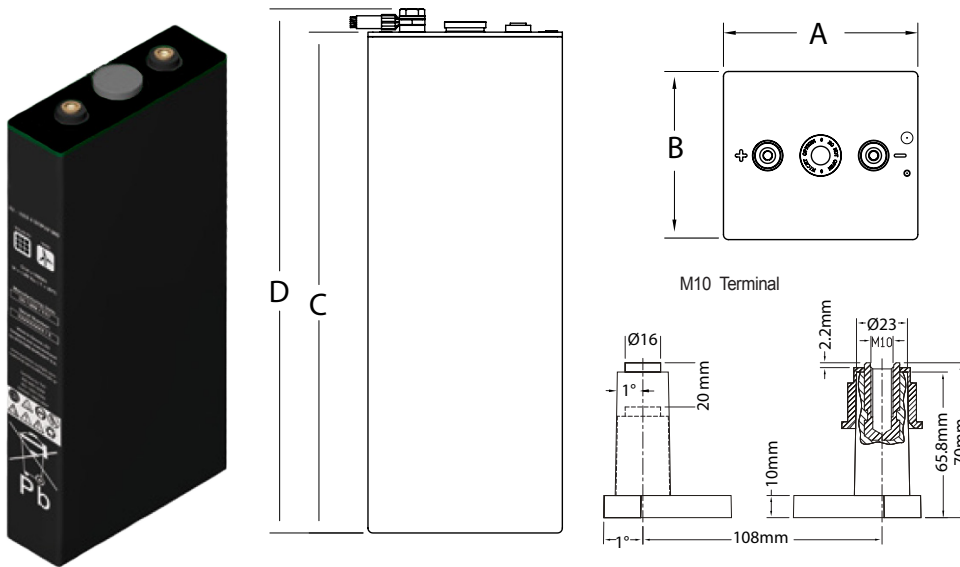
DATA SHEET



## Tubular Gel SOPzV Battery Cell

Discover® Tubular Gel RE Batteries provide superior deep cycling performance and reliability for demanding commercial, industrial and residential applications. Discover® Tubular Gel RE Batteries utilize Advanced Tubular Plate Technology to deliver long service life with maintenance-free requirements. Gel RE Batteries provide reliable energy storage for Stationary Backup and Telecom Networks, Road Surface, and Rail Traffic Signaling Systems, Solar, Wind, and Hybrid Off-grid and Grid-tie renewable energy applications. Discover® Tubular Gel RE Batteries provide maximum efficiency per discharge-charge cycle, and proven reliability in remote, high temperature, or unstable power network installations.

### Mechanical Drawings



### Mechanical Specifications

|                    |                      |        |
|--------------------|----------------------|--------|
| Industry Reference | 2V Tubular Gel SOPzV |        |
| Length (A)         | 7.8 in               | 198 mm |
| Width (B)          | 4.7 in               | 119 mm |
| Height (C)         | 22.4 in              | 568 mm |
| Total Height (D)   | 23.4 in              | 595 mm |
| Weight (Wet)       | 94 lbs               | 43 kgs |
| Terminal           | M10 Insert           |        |
| Poles              | 2                    |        |
| Cell(s)            | 1                    |        |
| Container          | Polypropylene        |        |

### Electrical Specifications

|                                       |                               |             |
|---------------------------------------|-------------------------------|-------------|
| Reference LVD<br>(I10 at 20°C   68°F) | 20% DOD                       | 2.03 V      |
|                                       | 50% DOD                       | 1.95 V      |
|                                       | 80% DOD                       | 1.90 V      |
| Cycle Life                            | 20% DOD                       | 6000 cycles |
|                                       | 50% DOD                       | 2300 cycles |
|                                       | 80% DOD                       | 1500 cycles |
| RINT                                  | 0.36 mΩ                       |             |
| Short Circuit (20°C   68°F)           | 5500 A                        |             |
| Self Discharge (20°C   68°F)          | 2-3% per month                |             |
| Maximum Operating Temperature         | -35°C (-31°F) to 50°C (122°F) |             |
| Electrolyte (20°C   68°F)             | GEL                           |             |

### Electrical Specifications

| 1.85 VPC at 20°C   68°F |          |         |        | 1.75 VPC at 27°C   80°F |        |        |        | 1.75 VPC at 20°C   68°F |          |        |      |
|-------------------------|----------|---------|--------|-------------------------|--------|--------|--------|-------------------------|----------|--------|------|
| 240 HR                  | 120 HR   | 120 HR  | 100 HR | 20 HR                   | 10 HR  | 8 HR   | 5 HR   | 3 HR                    | 1 HR     | 1 HR   | 1 HR |
| 1013 AH                 | 2.01 KWH | 1003 AH | 988 AH | 800 AH                  | 726 AH | 701 AH | 660 AH | 571 AH                  | 0.69 KWH | 347 AH |      |

### Constant Power Reference in Watts / Cell to 1.92VPC at 20°C | 68°F

| 240 HR | 168 HR | 120 HR | 100 HR | 72 HR | 50 HR | 48 HR | 24 HR | 20 HR | 12 HR | 10 HR |
|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| -      | -      | -      | -      | -     | -     | -     | -     | -     | -     | -     |

### Benefits & Features

#### Unparalleled Performance

- Engineered to deliver 80% of rated capacity above 1.90 volts.

#### Long Cycle Life

- Tubular positive plates and proprietary alloy compositions to provide a 50% Depth of Discharge cycle life of up to 2300 cycles @ 20°C / 68°F.

#### Low Total Cost of Ownership

- Low cost per cycle. Lifetime value maximized especially in hybrid systems where using batteries can dramatically reduce generator run times delivering lower maintenance and fuel costs and less CO2 emissions.

#### Maintenance-Free

- Sealed technology, Gel electrolyte and safety pressure relief valve with integral flame arrestor.

#### Complete Battery Solution

- Complete and ready to install systems with all necessary installation accessories. Flame retardant (UL 94-V0) containers available upon request.

#### Safe

- Tested and verified for compliance to applicable International Safety Standards.

#### IEC 61427 Compliant

- Tested for compliance with the International Electrical Commission requirements for battery performance and life in PV applications.

### Certified Quality

Discover Energy Corp. and its facilities and products are certified to multiple standards and compliance:

- IEC 60896-21: Requirements for Photovoltaic Energy
- IEC 60896-22: Requirements for Valve-Regulated lead-acid batteries
- DIN 40742: Specifications for Tubular Gel RE Cells
- DIN 40744: Specifications for Tubular Gel RE Blocks
- EN 50272-2: Safety Requirements for Stationary batteries
- ISO 9001, ISO 14001, BS OHSAS 18001: Manufacturing and Production facilities
- ETTS Germany

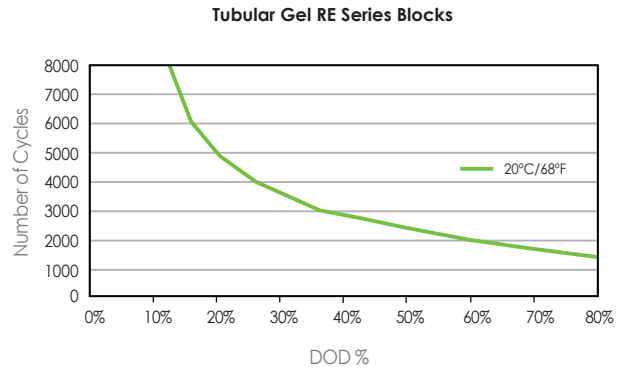
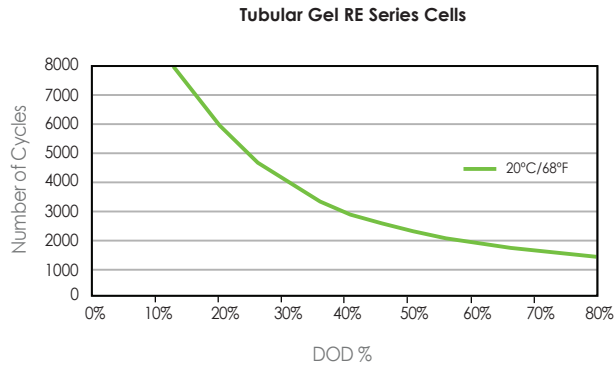


### Contact Us

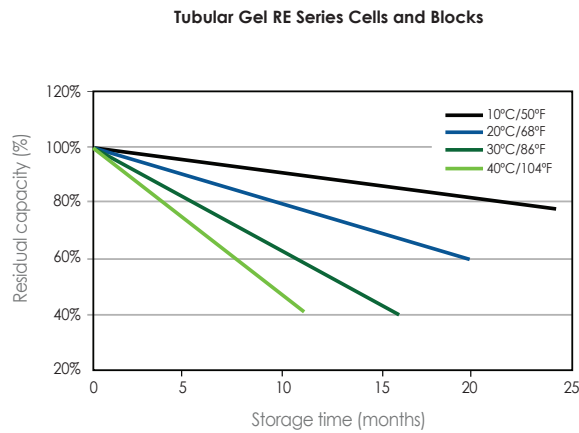


Unit 5-13511 Crestwood Place,  
Richmond, BC, V6V 2E9, Canada  
Email: info@discover-energy.com  
www.discover-energy.com

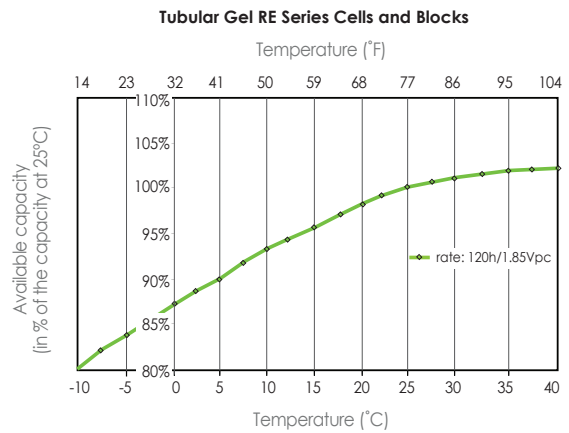
**Expected Number of Cycles vs. DOD**



**Self-Discharge Characteristics**



**Capacity vs. Temperature**



**Guidance for the Initial Low-voltage Settings (25°C/77°F Reference Temperature)**

