# 2VRE-9200TF

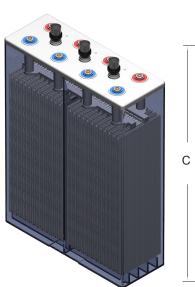
DATA SHEET

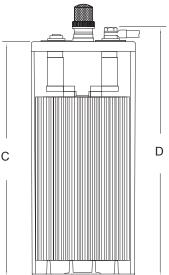


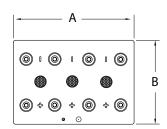
## **Tubular Flooded OPzS Battery Cell**

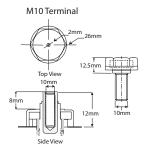
Discover® Tubular Flooded RE Series Batteries provide superior deep cycling performance and reliability for demanding commercial, industrial and residential applications. Discover® Tubular Flooded RE Series Batteries utilize Advanced Tubular Plate Technology to deliver long service life with low maintenance requirements. RE Series 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 Flooded RE Series batteries provide maximum efficiency per discharaecharge cycle, and proven reliability in remote, high temperature, or unstable power network installations.

## **Mechanical Drawings**









Mechanical Specifications							
Industry Reference	2V Tubular Flooded OPzS						
Length (A)	22.7 in	576 mm					
Width (B)	8.3 in	212 mm					
Height (C)	30.4 in	772 mm					
Total Height (D)	31.4 in	797 mm					
Weight (Wet)	507 lbs	230 kgs					
Weight (Dry)	348 lbs	158 kgs					
Terminal	M10						
Poles	8						
Cell(s)	1						
Container	SAN						

Electrical Specifications						
	20% DOD	2.05V				
Reference LVD (I10 at 20°C   68°F)	50% DOD	1.97V				
	80% DOD	1.91V				
Cycle Life	20% DOD	7000 cycles				
	50% DOD	2950 cycles				
	80% DOD	1900 cycles				
RINT		0.108mΩ				
Short Circuit (20°C   68	B°F)	18800 A				
Self Discharge (20°C	68°F)	2-3% per month				
Maximum Operating	Temperature	-35°C -31°F-50°C 122°F				
Electrolyte (20°C   68°	'F)	1.24 S.G.				

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
4769 AH	9.24 KWH	4620 AH	4528 AH	3697 AH	3361 AH	3247 AH	2954 AH	2493 AH	2.9 KWH	1454 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
34.5	47.6	63.8	74.5	98.0	131.8	136.3	234.7	269.7	393.5	447.9

## **Benefits & Features**

#### **Unparalleled Performance**

Engineered to deliver 80% of rated capacity above 1.91 volts.

## Long Cycle Life

Tubular positive plates and proprietary alloy compositions to provide a 50% Depth of Discharge cycle life of up to 2950 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.

#### Low Maintenance

Low maintenance designs, clear case jars and available watering systems to ease electrolyte level maintenance.

#### Complete Battery Solution

Complete and ready to install systems, filled and charged with all necessary installation accessories (available Dry Charged).

#### Safe

Tested and verified for compliance to applicable International Safety Standards. Built-in Ceramic arrestors to guard against ignition risks.

#### 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:

- 61427: Requirements Photovoltaic Energy Systems
- 60896-11: Requirements Vented Lead-Acid batteries
- DIN 40736-1: Specifications for RE Series Cells
- DIN 40737-3: Specifications for RE Series Blocks
- EN 50272-2: Safety Requirements for
- Stationary batteries ISO 9001, ISO 14001, BS OHSAS 180: Manufacturing and Production facilities
- ETTS Germany







## **Contact Us**

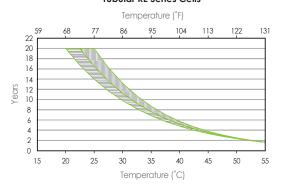


Unit 5-13511 Crestwood Place, Richmond, BC, V6V 2E9, Canada Email: info@discover-energy.com www.discover-energy.com

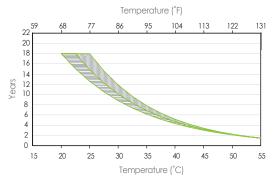


## **Expected Service Life vs. Operating Temperature**

## **Tubular RE Series Cells**

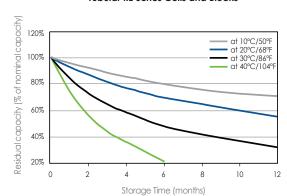


## **Tubular RE Series Blocks**



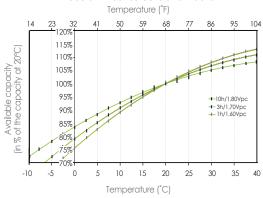
## **Self-Discharge Characteristics**

## Tubular RE Series Cells and Blocks



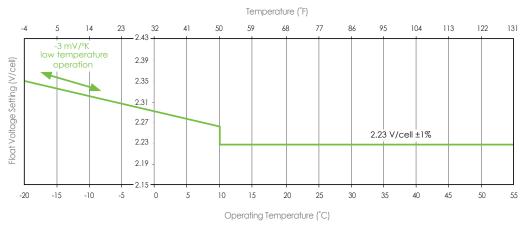
## Capacity vs. Temperature

## **Tubular RE Series Cells and Blocks**



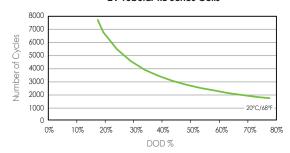
## Float Voltage Setting vs. Operating Temperature

## Tubular RE Series Cells and Blocks



## Number of Cycles vs. DOD

## 2V Tubular RE Series Cells



## 6V and 12V Tubular RE Series Blocks

