

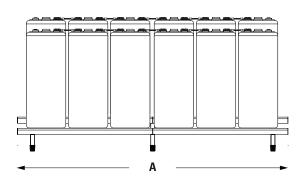
2VRE-5900TG-24V

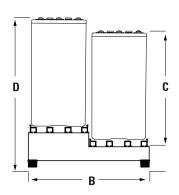
DATASHEET

Tubular Gel OPzV 24V System

Discover® Tubular OPzV 24V Systems provide superior deep cycling performance and reliability for demanding commercial, industrial and residential applications. Whether it's for solar application as an investment, or as power source for critical operations, Discover has a reliable power solution.

MECHANICAL DRAWINGS





MECHANICAL SPECIFICATIONS

Voltage	24			
Industry Reference	Tubular Gel OPzV			
Length (A)	53.15 in	1350 mm		
Width (B)	33.86 in	860 mm		
Height (C)	39.13 in	994 mm		
Total Height (D)	43.07 in	1094 mm		
Weight	4,127 lbs	1,872 kgs		
Cell(s)	12			
Cell Container	ABS Steel			
Rack				

ELECTRICAL SPECIFICATIONS

	20% DOD	24.60V		
Reference LVD / I10	50% DOD	23.64V		
	80% DOD	22.92V		
	20% DOD	7000 cycles		
Cycle Life	50% DOD	2950 cycles		
	80% DOD	1900 cycles		
Internal Resistance		0.21 mΩ		
Short Circuit		10500 A		
Self Discharge		2-3% per month		
Maximum Operating Temperature		-35°C / -31°F 50°C / 122°F		
Electrolyte		Gel		

ELECTRICAL SPECIFICATIONS

Updated: March 26th, 2018

240 HR	120 HR	100 HR	20 HR	10 HR	5 HR	3 HR	1 HR
1.85 Volts Per Cell (VPC)			1.75 Volts Per Cell (VPC)				
2981 AH	2966 AH	2927 AH	2376 AH	2160 AH	1960 AH	1701 AH	1049 AH

NOTE: All Electrical Specifications are based on 20°C / 68°F temperature

BENEFITS & FEATURES

Engineered to deliver 80% of rated capacity above 1.90 Volts.

Low cost per cycle, OPzV batteries provide the Lowest Total Cost of Ownership amongst lead acid technologies. Further savings can be achieved in Hybrid systems through diesel abatement and peak shaving.

Complete System. Available in 24V and 48V configurations and ready to install (connectors and battery rack included). Flame retardant (UL 94-V0) containers available upon request.

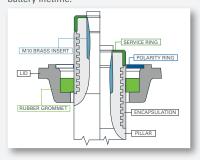
Tubular positive plates and proprietary alloy compositions to provide a 50% Depth of Discharge cycle life of up to 2950 cycles @ 20°C / 68°F.



Sealed technology. Gel electrolyte and safety pressure relief valve with integral flame arrestor. Battery containers are made of Acrylonitrile Butadiene Styrene (ABS).



Sliding Pole Terminals. Designed to accommodate natural grid growth occurrence throughout battery lifetime.



CERTIFIED QUALITY

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

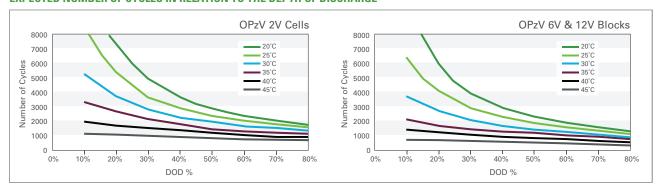
- ISO 9001/14001 and OSHA 18001 standards
- IEC 60896-21: Requirements for Photovoltaic Energy
- IEC 60896-22: Requirements for Valve Regulated Lead Acid batteries
- IEC 61427: Standard for photovoltaic energy systems
- DIN 40742: Standard for stationary tubular plate cells
- EN 50272-1 / 50272-2: Safety Requirements for stationary batteries
- UN 2800 (US DOT Compliance)
- Eurobat "Long Life" classification



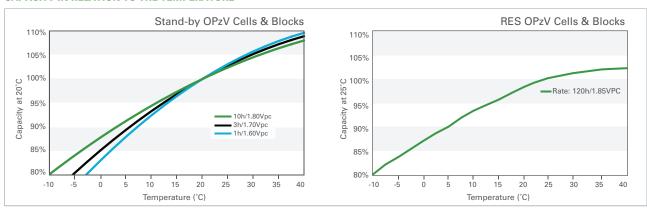




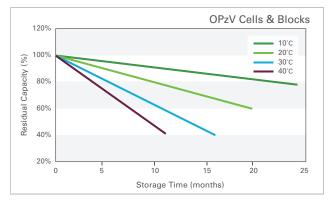
EXPECTED NUMBER OF CYCLES IN RELATION TO THE DEPTH OF DISCHARGE



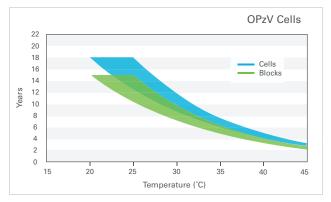
CAPACITY IN RELATION TO THE TEMPERATURE



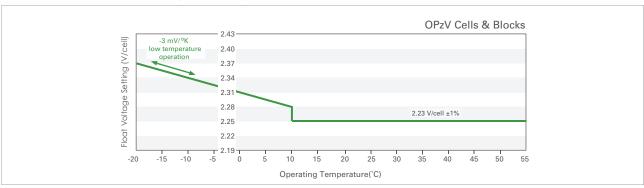
SELF-DISCHARGE CHARACTERISTICS



EXPECTED SERVICE LIFE IN RELATION TO OPERATING TEMPERATURE



Float Voltage Setting in Relation to Operating Temperature



Discover® attempts to ensure the correctness of the product description and data contained herein. We reserve the right to change designs, specifications and pricing at one titing without notice or publication. It is the respecificity the reserve of this information to useful to instruct the product of the reserve of th