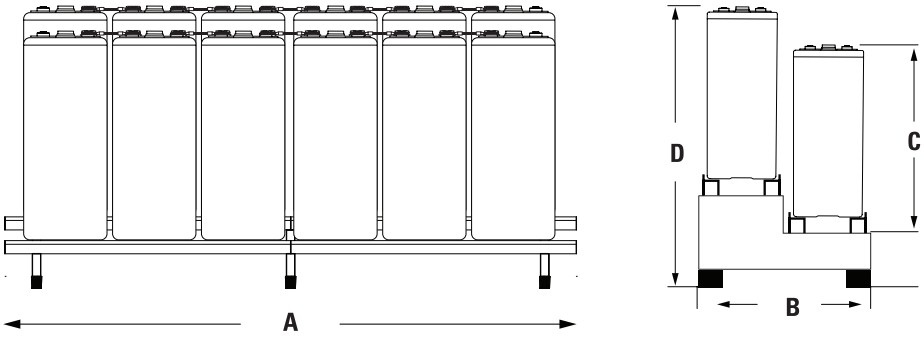
Discover®
Innovative Battery Solutions

2VRE-3200TG-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)	22.83 in	580 mm
Height (C)	34.21 in	869 mm
Total Height (D)	38.15 in	969 mm
Weight	2279.2 lbs	1036 kgs
Cell(s)	12	
Cell Container	ABS	
Rack	Steel	

ELECTRICAL SPECIFICATIONS

Reference LVD / I10	**20% DOD**	24.60V
	50% DOD	23.64V
	80% DOD	22.92V
Cycle Life	**20% DOD**	7000 cycles
	50% DOD	2950 cycles
	80% DOD	1900 cycles
Internal Resistance		0.33 mΩ
Short Circuit		6050 A
Self Discharge		2-3% per month
Maximum Operating Temperature		-35°C / -31°F | 50°C / 122°F
Electrolyte		Gel

ELECTRICAL SPECIFICATIONS

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)				
1643 AH	1635 AH	1610 AH	1265 AH	1150 AH	1039 AH	899 AH	554 AH

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

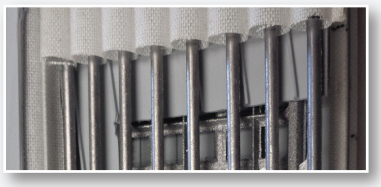
BENEFITS & FEATURES

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

Low cost per cycle. 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.

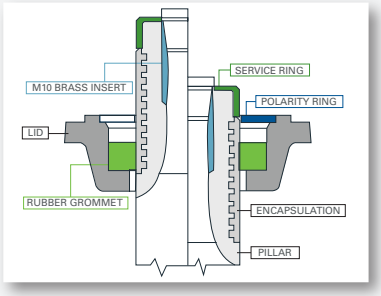
Complete System. Available in 24V and 48V configurations and ready to install (connectors and battery rack included). Flame retardant (UL 94-V0) containers available upon request.

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.

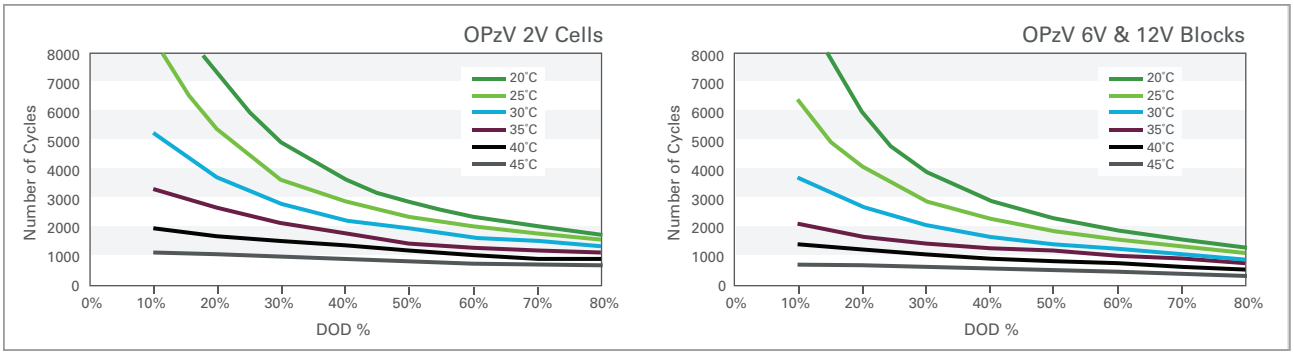


CERTIFIED QUALITY

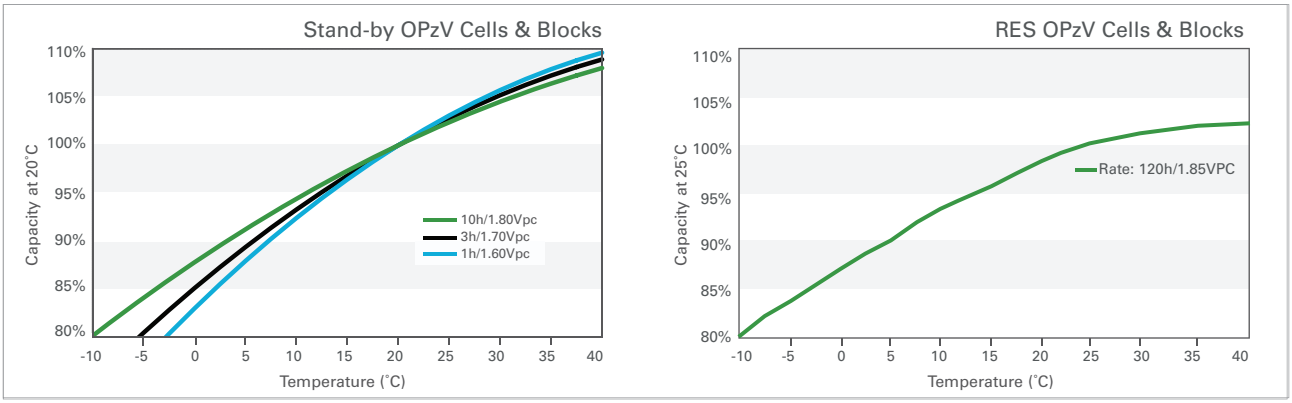
Discover and its facilities and products are certified to multiple standards and compliance:

- 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

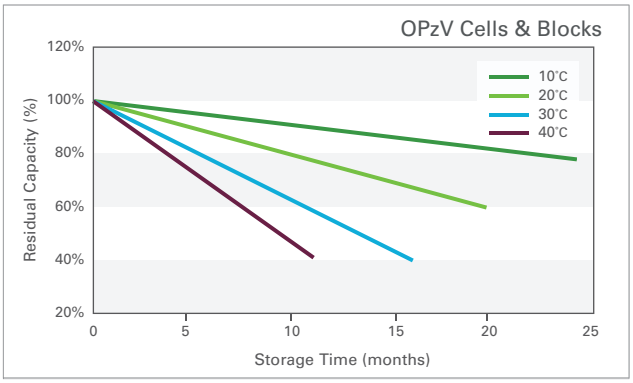
EXPECTED NUMBER OF CYCLES IN RELATION TO THE DEPTH OF DISCHARGE



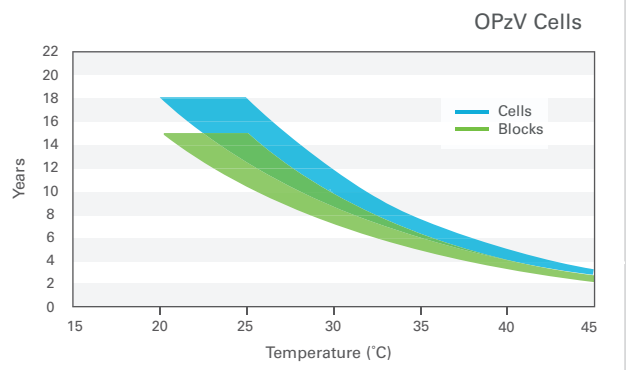
CAPACITY IN RELATION TO THE TEMPERATURE



SELF-DISCHARGE CHARACTERISTICS



EXPECTED SERVICE LIFE IN RELATION TO OPERATING TEMPERATURE



Float Voltage Setting in Relation to Operating Temperature