

OPzV Deep cycle Tubular GEL Battery

Brief Introduction

TECHLAN OPzV series Tubular GEL battery is with 25 years floating design life, it is a Valve Regulated Tubular Gel battery that adopts immobilized GEL and Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN standards and with die-casting positive grid and patent formula of active material. OPzV series exceeds DIN standard values with more than 25 years floating design life at 25°C and is even more suitable for cyclic use under extreme operating conditions.



Complied Standards

IEC60896-21/22	BS6290part4
JISC8704	GB/T19638
IEC61427	ISO 9001
ISO 14001	ISO 45001

Applications

Solar Energy System, Off-Grid Solar System
BTS Stations
Wind Energy System
UPS System, EPS System
Nuclear power station
Telecom backup power supply
Energy saving requirements
Emergency Power Systems

General features

Able to operate at -40~70°C
DOD 50% 3300 times Cycles
DOD 80% 2200 times Cycles
Adopts quality silicon nano gel electrolyte
Use super-C additives: Deep discharge recovery capability

Battery Construction

Component	Positive plate	Negative plate	Container & Cover	Safety valve
Features	Tubular plate	Thick high Sn low Ca grid with Special plate	Fire resistance ABS (UL94-V0optional)	Flame Si-Rubber and aging resistance
Component	Terminal	Separator	Electrolyte	Pillar seal
Features	Female Copper Insert T/AP/DP	Advanced PVC separator for high pressure cell design	German Evonik Silicon GEL	Two layers epoxy resin seal

Technical Specifications

Nominal Voltage	2V(Single Cell)		
Design Floating Life @25°C	25 Years		
Nominal Capacity @25°C(10 hour rate@1.8V)	Capacity @25°C	100%C (Ah)	
	20hour rate (1.8V)	105%C (Ah)	
	5 hour rate (1.8V)	0.85%C(Ah)	
Capacity @25°C	1 hour rate (1.75V)	0.63%C(Ah)	
	Internal Resistance	Full Charged Battery@25°C	≤0.02*(mΩ)
Ambient Temperature	Discharge	-40°C~70°C	
	Charge	-0°C~50°C	
	Storage	-20°C~60°C	
Max.Discharge Current@25°C	40°C	105%	
	25°C	100%	
	0°C	89%	
Capacity affected by Temperature (10 hour)	-15°C	79%	
	Self-Discharge@25°Cper Month	2%	
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than C*0.2A Voltage 2.25-2.3V	
	Cycle Use	Initial Charging Current Less than C*0.2A Voltage 2.37-2.4V	

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OPzV 2V Battery Items specifications

Model	Nominal Voltage (V)	Capacity (Ah)	Dimension (mm)				Net Weight	Gross Weight	Terminal
			Length	Width	Height	Total Height			
4OPzV200	2	200	103	206	375	390	18	21	M8
5OPzV250	2	250	124	206	375	390	22.5	24	M8
6OPzV300	2	300	145	206	375	390	25	27.5	M8
5OPzV350	2	350	124	206	473	505	28	29.5	M8
6OPzV420	2	420	145	206	473	505	32	34.5	M8
7OPzV490	2	490	166	206	491	506	38	40.5	M8
6OPzV600	2	600	145	206	666	681	46	48.5	M8
8OPzV800	2	800	191	210	666	681	65	64.5	M8
10OPzV1000	2	1000	233	210	666	681	74	79	M8
12OPzV1200	2	1200	275	210	666	681	93	93.5	M8
12OPzV1500	2	1500	275	210	795	831	112	114.5	M8
16OPzV2000	2	2000	399	214	792	807	152	154	M8
24OPzV2500	2	2500	487	212	792	807	187	190	M8
24OPzV3000	2	3000	576	212	792	807	225	227	M8

Performance Characteristics

