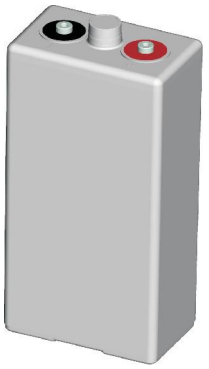
MAIN NEW ENERGY CO.,LTD

Tubular Gel Battery

OPzV420 (2V420AH)



Nomial Voltage	2V	
Capacity	420.0Ah@10hr to 1.80V/cell	
Dimension	Length	145±2mm (5.17 inches)
	Width	206±3mm (8.11 inches)
	Container Height	471±3mm (18.5 inches)
	Total Height (with Terminal)	506±3mm (19.9 inches)
Approx Weight	Approx 34.0 kg (75.0lbs)	
Container Material	ABS	
Rated Capacity	420 AH/42.0A	(10hr,1.80V/cell,20°C/68°F)
	365.5 A H/73.1A	(5hr,1.75V/cell,20°C/68°F)
	324 AH/108A	(3hr,1.75V/cell,20°C/68°F)
	239 AH/239A	(1hr,1.60V/cell,20°C/68°F)
Max. Discharge Current	3360A (5s)	
Internal Resistance	Approx 0.8mΩ	
Operating Temp.Range	Discharge : -20~55°C (-4~131°F) Charge : 0 40°C (32 104°F) Storage : -20~50°C (-4~122°F)	
Cycle Use	Initial Charging Current less than 105.0A.Voltage 2.40V~2.50V at 20°C(68°F)Temp. Coefficient -5mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 2.25V~2.30V at 20°C(68°F)Temp. Coefficient -3mV/°C	
Self-discharge	<2% pre month @ 20°C(68°F)	

Applications

- *Solar energy, wind energy*
- *Electric power, nuclear power*
- *Communication*
- *Ship, maritime affairs*
- *UPS, medical facilities and emergency lighting*
- *Situation with high environmental protection and energy-saving*
- *Better safety performance and reliability*
- *Designed service life of 20 years*

Main Technical Advantages

- Plate: positive plate adopts tubular plate which can prevent active material falling, and adopts multi-component alloy frame. have fine corrosion-resisting performance and long service life. Negative plate adopts special radiated structure.
- Separator: adopt special micro-pore PVC-SiO_2 separator from Europe AMER-SIL Company, separator have big porosity and low resistance.
- Electrolyte: adopts Germany gas silicon dioxide,electrolyte in gel state in the battery without flowing,leakage and lamination can be avoided.
- Safety valve: adopt Germany technology,constant opening and closing,accumulator case expansion,damage and electrolyte dry up can be avoided.

Constant Current Discharge (Amperes) at 20 °C (68°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	329	303	248	188	126	97.2	66.5	46.4	39.3
1.80V/cell	405	367	289	212	139	106	71.8	49.7	42.0
1.75V/cell	479	411	308	220	142	108	73.1	50.6	42.7
1.70V/cell	537	449	326	229	146	110	74.3	51.2	43.2
1.65V/cell	577	474	339	235	149	112	75.4	51.8	43.6
1.60V/cell	604	490	347	239	151	114	76.2	52.3	43.9

Constant Power Discharge (Watts) at 20 °C (68°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	612	570	473	363	245	190	131	92	78.2
1.80V/cell	740	680	546	407	268	206	141	98.4	83.4
1.75V/cell	860	751	576	420	274	209	143	99.8	84.6
1.70V/cell	948	808	604	434	280	213	145	101	85.4
1.65V/cell	1000	840	621	443	284	216	146	102	86.2
1.60V/cell	1026	857	631	448	286	217	147	102	86.6

Dimensions

T11 Terminal