

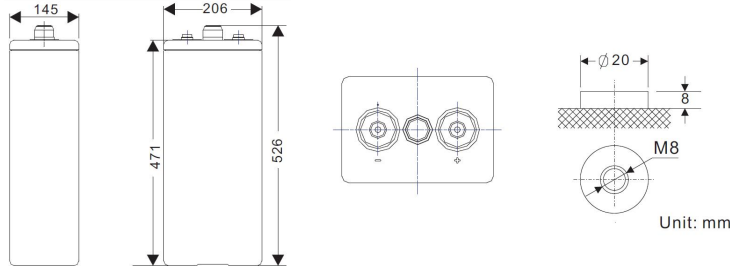


# OPzS420 Tubular Battery



## PHYSICAL SPECIFICATION

Nominal Voltage		2V	
Nominal Capacity (10HR)		420Ah	
Dimension	Length	145±2mm	(5.71 inches)
	Width	206±2mm	(8.11 inches)
	Container Height	471±2mm	(18.54 inches)
	Total Height	526±2mm	(20.70 inches)
Weight		Approx. 32 Kg (70.53lbs)	
Standard Terminal		Bolt-and-nuts terminal Bolt Type: M8	



## ELECTRICAL SPECIFICATION

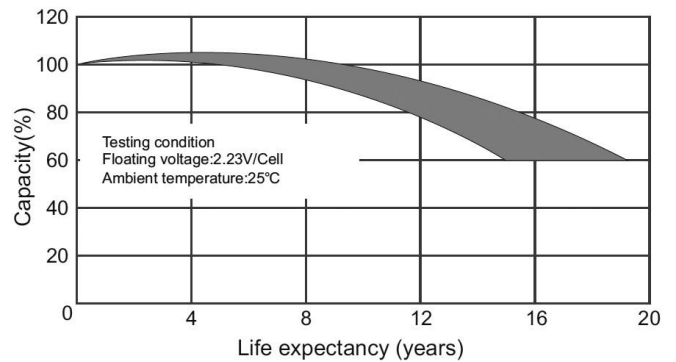
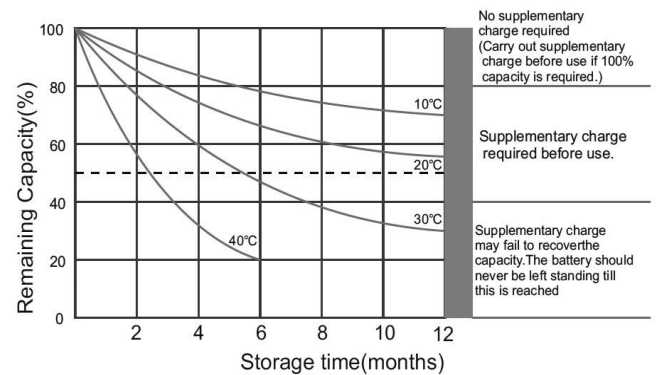
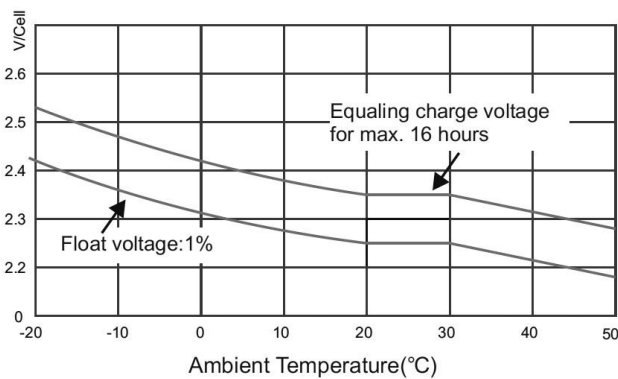
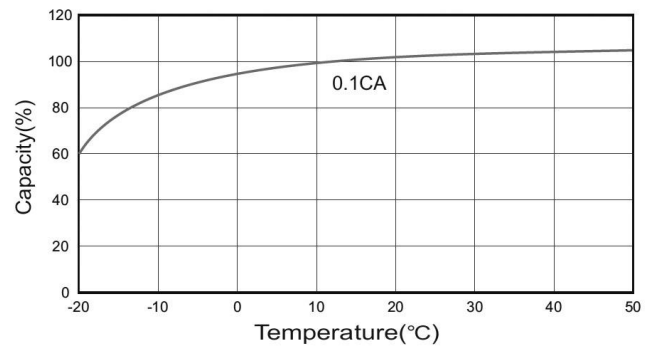
Characteristics			Main Advantages
Capacity	20 hour rate (24.82A to 1.80v/cell) 10 hour rate (42.25A to 1.80v/cell) 5 hour rate (72.16A to 1.75v/cell) 1hour rate (242.3A to 1.60v/cell)	496.4Ah 422.5Ah 360.8Ah 242.3Ah	<ul style="list-style-type: none"> <li>&gt;&gt; adopt tubular positive plate</li> <li>&gt;&gt; longest lifespan under deep discharge</li> <li>&gt;&gt; Strong temperature resistance performance</li> <li>&gt;&gt; Better charge reception capability</li> <li>&gt;&gt; 20 years design life</li> </ul>
Operating Temp. Range	Discharge : -20°C~55°C Charge : -10°C~45°C Storage : -15°C~45°C		
Max. Discharge Current	2000A(5sec)		
Short Circuit Current	4500A		
Designed life	20 years ( floating ) at 25°C(77 °F)		
Internal Resistance	Full charged battery (25°C,77 °F) 0.5mΩ		
Constant Voltage Charge	Cycle	Initial Charging Current less than ≤100A Voltage: 2.35~2.40V at 25°C (77 °F) Temperature Coefficient -5mV/°C	
	Standby	No limit on Initial Charging Current Voltage: 2.23V at 25°C (77 °F) Temperature Coefficient -3mV/°C	

### CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	30min	1h	2h	3h	4h	5h	8h	10h	24h
1.60V	354	242	151	109	87	75	53.6	44.6	19.82
1.65V	342	237	148	107	86	74	53.2	44.3	19.80
1.70V	328	230	144	106	85	73	52.5	44.1	19.61
1.75V	316	223	141	103	83	72	51.6	43.5	19.28
1.80V	289	212	135	101	81	70	50.3	42.1	18.82
1.85V	256	197	128	98	79	68	48.8	41.6	18.23

### CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	30min	1h	2h	3h	4h	5h	8h	10h	24h
1.60V	645	446	279	202	161	139	99.6	82.8	37.00
1.65V	630	437	273	199	159	137	98.8	82.5	36.92
1.70V	605	424	267	196	158	135	97.5	82.0	36.50
1.75V	584	414	262	192	155	134	96.2	81.3	36.20
1.80V	539	399	255	191	154	133	95.5	79.5	35.74
1.85V	487	374	244	187	151	130	93.7	79.8	35.32



(Note) All above information shall be changed without prior notice, Shimastu reserves the right to explain and update the latest information.